

**GIS REGISTRY INFORMATION**

**SITE NAME:** Former Wisconsin Knife Works  
**BRRTS #:** 03-54-001426 **FID # (if appropriate):**  
**COMMERCE # (if appropriate):**  
**CLOSURE DATE:** 10-Aug-06  
**STREET ADDRESS:** 2710 Prairie Avenue  
**CITY:** Beloit

**SOURCE PROPERTY GPS COORDINATES (meters in WTM91 projection):** X= 601096 Y= 230975

**CONTAMINATED MEDIA:** Groundwater  Soil  Both

**OFF-SOURCE GW CONTAMINATION >ES:** Yes  No

**IF YES, STREET ADDRESS 1:**

**GPS COORDINATES (meters in WTM91 projection):** X= Y=

**OFF-SOURCE SOIL CONTAMINATION >Generic or Site-Specific RCL (SSRCL):** Yes  No

**IF YES, STREET ADDRESS 1:**

**GPS COORDINATES (meters in WTM91 projection):** X= Y=

**CONTAMINATION IN RIGHT OF WAY:** Yes  No

**DOCUMENTS NEEDED:**

- Closure Letter, and any conditional closure letter issued X
- Copy of most recent deed, including legal description, for all affected properties X
- Certified survey map or relevant portion of the recorded plat map (if referenced in the legal description) for all affected properties X
- County Parcel ID number, if used for county, for all affected properties X
- Location Map which outlines all properties within contaminated site boundaries on USGS topographic map or plat map in sufficient detail to permit the parcels to be located easily (8.5x14" if paper copy). If groundwater standards are exceeded, the map must also include the location of all municipal and potable wells within 1200' of the site. X
- Detailed Site Map(s) for all affected properties, showing buildings, roads, property boundaries, contaminant sources, utility lines, monitoring wells and potable wells. (8.5x14", if paper copy) This map shall also show the location of all contaminated public streets, highway and railroad rights-of-way in relation to the source property and in relation to the boundaries of groundwater contamination exceeding ch. NR 140 ESs and soil contamination exceeding ch. NR 720 generic or SSRCLs. X
- Tables of Latest Groundwater Analytical Results (no shading or cross-hatching) X
- Tables of Latest Soil Analytical Results (no shading or cross-hatching) X
- Isoconcentration map(s), if required for site investigation (SI) (8.5x14" if paper copy). The isoconcentration map should have flow direction and extent of groundwater contamination defined. If not available, include the latest extent of contaminant plume map. NA
- GW: Table of water level elevations, with sampling dates, and free product noted if present X
- GW: Latest groundwater flow direction/monitoring well location map (should be 2 maps if maximum variation in flow direction is greater than 20 degrees) X
- SOIL: Latest horizontal extent of contamination exceeding generic or SSRCLs, with one contour X
- Geologic cross-sections, if required for SI. (8.5x14" if paper copy) NA
- RP certified statement that legal descriptions are complete and accurate X
- Copies of off-source notification letters (if applicable) NA
- Letter informing ROW owner of residual contamination (if applicable)(public, highway or railroad ROW) X
- Copy of (soil or land use) deed restriction(s) or deed notice if any required as a condition of closure X



## State of Wisconsin \ DEPARTMENT OF NATURAL RESOURCES

Jim Doyle, Governor  
Scott Hassett, Secretary  
Lloyd L. Eagan, Regional Director

South Central Region Headquarters  
3911 Fish Hatchery Road  
Fitchburg, Wisconsin 53711-5397  
Telephone 608-275-3266  
FAX 608-275-3338  
TTY Access via relay - 711

August 30, 2006

Dave Johnson  
Environmental Compliance Manager  
Black and Decker  
8780 Purdue Road  
Suite 2  
Indianapolis, IN 46268

**SUBJECT:** Final Case Closure By Closure Committee  
Wisconsin Knife Works, 2710 Prairie Avenue, Beloit, WI  
WDNR BRRTS Activity # 03-54-001426

Dear Mr. Johnson:

On October 9, 2003, the South Central Region Closure Committee reviewed the above referenced case for closure. This committee reviews environmental remediation cases for compliance with state laws and standards to maintain consistency in the closure of these cases. On October 20, 2003, you were notified that the Closure Committee had granted conditional closure to this case.

On August 3, 2006, the Department received correspondence indicating that you have complied with the requirements of closure. The conditions of closure were abandonment of all site wells and the filing of a deed restriction and cap maintenance plan for the property. Based on the correspondence and data provided, it appears that your case has been remediated to Department standards in accordance with s. NR 726.05, Wis. Adm. Code. The Department considers this case closed and no further investigation, remediation or other action is required at this time.

Please be aware that pursuant to s. 292.12 Wisconsin Statutes, compliance with the requirements of this letter is a responsibility to which the current property owner and any subsequent property owners must adhere. If these requirements are not followed or if additional information regarding site conditions indicates that contamination on or from the site poses a threat to public health, safety, welfare, or the environment, the Department may take enforcement action under s. 292.11 Wisconsin Statutes to ensure compliance with the specified requirements, limitations or other conditions related to the property or this case may be reopened pursuant to s. NR 726.09, Wis. Adm. Code. It is the Department's intent to conduct inspections in the future to ensure that the conditions included in this letter including compliance with referenced maintenance plans are met.

Pursuant to s. 292.12(2)(a), Wis. Stats., the pavement or other impervious cap that currently exists in the location shown on the attached map shall be maintained in compliance with the attached maintenance plan in order to minimize the infiltration of water and prevent additional

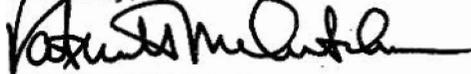
groundwater contamination that would violate the groundwater quality standards in ch. NR 140, Wis. Adm. Code, and to prevent direct contact with residual soil contamination that might otherwise pose a threat to human health. If soil in the specific locations described above is excavated in the future, the property owner at the time of excavation must sample and analyze the excavated soil to determine if residual contamination remains. If sampling confirms that contamination is present the property owner at the time of excavation will need to determine whether the material would be considered solid or hazardous waste and ensure that any storage, treatment or disposal is in compliance with applicable statutes and rules. In addition, all current and future owners and occupants of the property need to be aware that excavation of the contaminated soil may pose an inhalation or other direct contact hazard and as a result special precautions may need to be taken during excavation activities to prevent a health threat to humans.

The following activities are prohibited on any portion of the property where asphalt pavement is required as shown on the attached map, unless prior written approval has been obtained from the Wisconsin Department of Natural Resources: 1) removal of the existing barrier; 2) replacement with another barrier; 3) excavating or grading of the land surface; 4) filling on capped or paved areas; 5) plowing for agricultural cultivation; or 6) construction or placement of a building or other structure.

Your site will be listed on the DNR Remediation and Redevelopment GIS Registry of Closed Remediation Sites. Information that was submitted with your closure request application will be included on the GIS Registry. To review the sites on the GIS Registry web page, visit <http://dnr.wi.gov/org/aw/rr/gis/index.htm>. If your property is listed on the GIS Registry because of remaining contamination and you intend to construct or reconstruct a well, you will need prior Department approval in accordance with s. NR 812.09(4)(w), Wis. Adm. Code. To obtain approval, Form 3300-254 needs to be completed and submitted to the DNR Drinking and Groundwater program's regional water supply specialist. This form can be obtained on-line <http://www.dnr.state.wi.us/org/water/dwg/3300254.pdf> or at the web address listed above for the GIS Registry.

The Department appreciates your efforts to restore the environment at this site. If you have any questions regarding this closure decision or anything outlined in this letter, please contact me at 608-275-3241.

Sincerely,



Patrick McCutcheon  
South Central Region  
Remediation & Redevelopment Team Supervisor

cc: Doug Opell, Keramida Environmental, Inc., 330 North College Avenue, Indianapolis, IN 46202  
Wendy Weihemuller, DNR



## State of Wisconsin \ DEPARTMENT OF NATURAL RESOURCES

Jim Doyle, Governor  
Scott Hassett, Secretary  
Ruthe E. Badger, Regional Director

South Central Region Headquarters  
3911 Fish Hatchery Road  
Fitchburg, Wisconsin 53711-5397  
Telephone 608-275-3266  
FAX 608-275-3338  
TTY 608-275-3231

October 20, 2003

Dave Johnson  
Environmental Compliance Manager  
Black and Decker  
8780 Purdue Road  
Suite 2.  
Indianapolis, IN 46268

Subject: Conditional Case Closure  
Wisconsin Knife Works, 2710 Prairie Avenue, Beloit, Wisconsin  
WDNR BRRS # 03-54-001426

Dear Mr. Johnson:

On October 9, 2003, your request for closure of the case described above was reviewed by the South Central Region Closure Committee. The Regional Closure Committee reviews environmental remediation cases for compliance with state rules and statutes to maintain consistency in the closure of these cases. After careful review of the closure request, the Closure Committee has determined that the petroleum and chlorinated solvents contamination on the site in the vicinity of the former waste-oil settling tank, underground storage tank, above-ground storage tank, and storage containers for waste metal cuttings appears to have been investigated and remediated to the extent practicable under site conditions. Your case has been remediated to Department standards in accordance with s. NR 726.05, Wis. Adm. Code and will be closed if the following conditions are satisfied:

The monitoring wells, soil vapor extraction wells, and other remediation system wells at the site must be properly abandoned in compliance with ch. NR 141, Wis. Adm.. Documentation of well abandonment must be submitted to me on Form 3300-5B found at [www.dnr.state.wi.us/org/water/dgw/gw/](http://www.dnr.state.wi.us/org/water/dgw/gw/) or provided by the Department of Natural Resources.

To close this site, the Department requires that a deed restriction be signed and recorded to address the issue of the remaining soil contamination associated with the site. The purpose of the restriction is to maintain an impermeable surface barrier over the remaining soil contamination in the vicinity of the waste-oil settling tank to prevent it from impacting human health and the environment. The barrier must extend from the edge of the building to the southern edge of the property and at least 20 feet east and west of the margins of the settling tank excavation (particularly beyond B-9, B-10, and MW-2).

You will need to submit a draft deed restriction to me before the document is signed and recorded. You will find a model deed restriction enclosed for your use or visit our web site at [www.dnr.state.wi.us/org/rr/](http://www.dnr.state.wi.us/org/rr/) (see Publication RR-606). For Option 3 in the model deed restriction

enclosed, you may either submit a maintenance plan to me or insert maintenance language in the deed that is similar to what I have enclosed as a sample. To assist us in our review of the deed restriction, you should submit a copy of the property deed to me along with the draft document. After the Department of Natural Resources has reviewed the draft document for completeness, you should sign it if you own the property, or have the appropriate property owner sign it, and have it recorded by the Rock County Register of Deeds. Then you must submit a copy of the recorded document, with the recording information stamped on it, to me. Please be aware that if a deed restriction is recorded for the wrong property because of an inaccurate legal description that you have provided, you will be responsible for recording corrected documents at the Register of Deeds Office to correct the problem.

For the purpose of the GIS Registry please submit tables of soil and groundwater analyses that are not shaded (shaded tables are not legible on the GIS Registry web page) and a copy of the plat map that is a maximum of 8.5x14 inches in size. Electronic copies of documents for the GIS Registry are acceptable/preferred (see Publication RR-690).

When the above conditions have been satisfied, please submit a letter to let me know that applicable conditions have been met, and your case will be closed. Your site will be listed on the DNR Remediation and Redevelopment GIS Registry of Closed Remediation Sites. Information that was submitted with your closure request application will be included on the registry. To review the sites on the GIS Registry web page, visit <http://gomapout.dnr.state.wi.us/org/at/et/geo/gwur/index.htm>

If this is a PECFA site, section 101.143, Wis. Stats., requires that PECFA claimants seeking reimbursement of interest costs, for sites with petroleum contamination, submit a final reimbursement claim within 120 days after they receive a closure letter on their site. For claims not received by the PECFA Program within 120 days of the date of this letter, interest costs after 60 days of the date of this letter will not be eligible for PECFA reimbursement.

Please be aware that the case may be reopened pursuant to s. NR 726.09, Wis. Adm. Code, if additional information regarding site conditions indicates that contamination on or from the site poses a threat to public health, safety, or welfare or to the environment.

We appreciate your efforts to restore the environment at this site. If you have any questions regarding this letter, please contact me at (608) 275-3224.

Sincerely,



Randy Maass  
Hydrogeologist  
Bureau for Remediation & Redevelopment

Enclosure

cc: Doug Opell, Heritage Environmental Services, 7821 West Morris Street, Indianapolis, IN 46231  
Wendy Weihemuller, DNR

WARRANTY DEED

Document Number

155642/

RPC  
004  
1

This Deed, made between Black & Decker (U.S.) Inc., a Delaware corporation

Grantor, and BBM. LLC, a Wisconsin limited liability company

Grantee  
Grantor, for a valuable consideration, conveys and warrants to Grantee the following described real estate in Rock County, State of Wisconsin:

Lots 68 and 69, Beloit Township Industrial Park, Town of Beloit, Rock County, Wisconsin, according to the recorded plat thereof.

B67

RECORDED

02 AUG 5 AM 10 18

RANDAL LEYES  
REGISTER OF DEEDS  
ROCK CO WI 53545

Recording Area  
Name and Return Address  
Attorney Jerome Elliott  
P.O. Box 599  
Beloit, WI 53511

1100

6-2-449.A68 (004 045069) & 6-2-449.A69 (004 045070)

Parcel Identification Number (PIN)

This is not  homestead property. 74  
(X) (is not)

CODE  
W-7  
EXCLUSION

TRANSFER

\$ 2595.00  
FEE

Exceptions to warranties: municipal and zoning ordinances and agreements entered under them, recorded easements for the distribution of utility and municipal services, recorded building and use restrictions and covenants, general taxes, and special assessments from and after June 24, 2002, rights or claims of parties other than Grantor and Grantee in actual possession of any or all of the property, unrecorded easements, discrepancies, or conflicts in boundary lines, shortage in area, or encroachments except as shown on the survey, and unfiled mechanics' or materialmen's liens.

Dated this 26 day of July, 2002

BLACK & DECKER (U.S.) INC.

Linda H. Biagianni  
LINDA H. BIAGIANNI VICE PRESIDENT

AUTHENTICATION

Signature(s)

authenticated this 26 day of July, 2002

ACKNOWLEDGMENT

STATE OF MARYLAND

Baltimore County, ss.

Personally came before me this 26<sup>th</sup> day of July, 2002, the above named

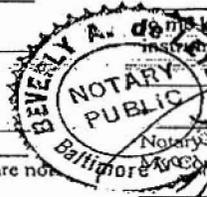
Linda H. Biagianni

TITLE: MEMBER STATE BAR OF WISCONSIN

(If not, authorized by § 706.06, Wis-Stats.)

THIS INSTRUMENT WAS DRAFTED BY  
Jonathan W. Groessl  
Brennan, Steil, Basting & MacDougall, S.C.

(Signatures may be authenticated or acknowledged. Both are not necessary.)



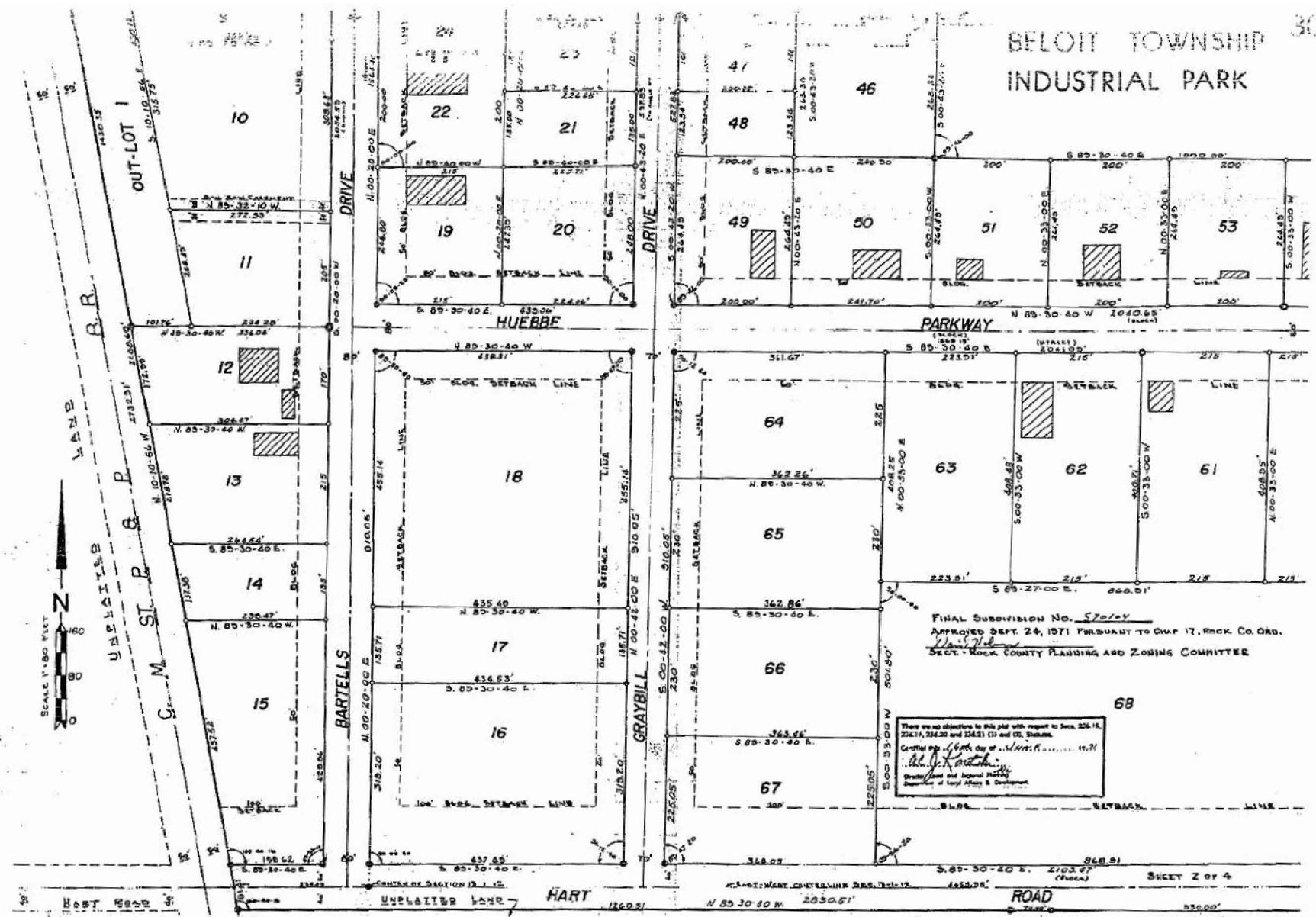
known to be the person(s) who executed the foregoing instrument and acknowledge the same

Beverly A. de Leyer  
Notary Public, State of Maryland

My Commission is permanent (If not, state expiration date)

\*Names of persons signing in any capacity should be typed or printed below their signatures

BELOIT TOWNSHIP 30  
INDUSTRIAL PARK



FINAL SUBDIVISION NO. 57014  
 APPROVED DEPT. 24, 1971 PURSUANT TO CHAP. 17, ROCK CO. ORD.  
 SECT. ROCK COUNTY PLANNING AND ZONING COMMITTEE

There are no objections to this plat with regard to Secs. 226.14, 226.15, 226.20 and 226.21 (1) and (2), Statutes.  
 Certified and filed this day of March, 1971.  
*Ch. J. K. ...*  
 Director and General Manager  
 Department of Land Affairs & Development

I hereby certify that I have on this day of March, 1971, micro-photographed the foregoing and above described document in accordance with standards established by Sec. 226.01(1) of the Statutes and with established procedures.  
 Camera Operator

# BELOIT TOWNSHIP INDUSTRIAL PARK

## SURVEYORS CERTIFICATE OF COMPLIANCE

I, JOHN J. LEE, A REGISTERED LAND SURVEYOR, DO HEREBY CERTIFY THAT I HAVE SURVEYED, SUBDIVIDED AND MAPPED THE WITHIN DESCRIBED LAND, TO BE HEREAFTER KNOWN AND DESIGNATED AS "BELOIT TOWNSHIP INDUSTRIAL PARK", THAT SAID SUBDIVISION IS LAID OUT UPON AND INCLUDES PART OF THE SW 1/4 OF THE SE 1/4, THE SE 1/4 OF THE SW 1/4 OF SECTION 12 PART OF THE NE 1/4 OF THE NW 1/4, SE 1/4 OF THE NW 1/4, NW 1/4 OF THE NE 1/4, SE 1/4 OF THE NE 1/4, ALL OF THE SW 1/4 OF THE NW 1/4, 5/8 1/4 OF THE NW 1/4, 1/2 OF THE SE 1/4 AND NW 1/4 OF THE SE 1/4 OF SECTION 13; BEING PART OF OUT-LOTS 12-B, 13-1, 13-2, 13-3 AND 13-7, ALL OF OUT-LOTS 13-5, 13-4 AND 13-6 OF THE ADJACENT'S PLAT OF BELOIT TOWNSHIP, LOT 23, HILLSIDE SUBDIVISION T.1N. R.12 E. OF THE 4<sup>TH</sup> P.M. BELOIT TOWNSHIP, ROCK COUNTY, WISCONSIN.

DESCRIBED AS FOLLOWS:  
 BEGINNING AT THE NORTH QUARTER CORNER OF SECTION 13, AFORESAID; THENCE SOUTH 85-30-20 EAST ALONG THE NORTH LINE OF SAID SECTION, 521.05 FEET; THENCE SOUTH 00-46-50 WEST 345.57 FEET; THENCE SOUTH 85-50-20 EAST 490.00 FEET; THENCE SOUTH 00-46-50 WEST 721.17 FEET; THENCE NORTH 80-30-20 WEST 450.00 FEET; THENCE SOUTH 00-53-20 WEST 225.54 FEET; THENCE SOUTH 00-30-40 EAST 1000.00 FEET; THENCE NORTH 00-53-00 EAST 100.00 FEET; THENCE SOUTH 85-50-40 EAST 658.85 FEET TO THE WEST R.O.W. LINE OF PRAIRIE AVENUE (C.T.H. G.); THENCE SOUTH 00-33-00 WEST 504.45 FEET; THENCE NORTH 44-28-50 WEST 84.81 FEET; THENCE NORTH 00-30-40 WEST 478.00 FEET; THENCE SOUTH 00-33-00 WEST 405.35 FEET; THENCE SOUTH 85-27-00 EAST 535.50 FEET TO THE WEST R.O.W. LINE OF PRAIRIE AVENUE (C.T.H. G.); THENCE SOUTH 00-33-00 WEST 578.91 FEET; THENCE NORTH 85-30-40 WEST 2850.81 FEET TO THE EAST R.O.W. LINE OF THE C. M. & P. RAILWAY; THENCE NORTH 10-10-36 WEST 2732.31 FEET TO THE NORTH LINE OF SECTION 13, AFORESAID, AND THE CENTERLINE OF HUEBBE PARKWAY; THENCE SOUTH 80-25-00 EAST 342.83 FEET; THENCE NORTH 00-53-00 EAST 401.50 FEET; THENCE SOUTH 80-25-00 EAST 401.50 FEET; THENCE SOUTH 00-53-00 WEST 10.00 FEET TO A POINT OF CURVE; THENCE SOUTHERLY ALONG A CURVE CONVEXED EASTERLY 7769 FEET, HAVING A RADIUS OF 358.27 FEET, THE BEARS SOUTH 7-05-45 WEST 77.54 FEET TO A POINT OF TANGENCY; THENCE SOUTH 13-18-30 WEST 116.06 FEET TO A POINT OF CURVE; THENCE SOUTHERLY ALONG A CURVE CONVEXED WESTERLY 41.74 FEET, HAVING A RADIUS OF 28478 FEET, THE CHORD BEING SOUTH 7-05-45 WEST 41.64 FEET TO A POINT OF TANGENCY; THENCE SOUTH 00-53-00 WEST 1400.00 FEET TO THE CORNER OF SECTION 13, AFORESAID. THAT SAID SUBDIVISION WAS LAYED OUT, DEDICATED AND MAPPED AT THE REQUEST OF THE TOWN OF BELOIT, BARCE REALTY CO. AND BURT & ASSOCIATES, OWNERS OF SAID LAND. THAT SAID PLAT IS A CORRECT REPRESENTATION OF ALL THE EXTERIOR BOUNDARIES OF THE LAND SURVEYED AND THE DIVISION THEREOF THAT ALL DIMENSIONS ARE GIVEN IN FEET AND DECIMAL FRACTIONS THEREOF AND ARE MEASURED TO THE NEAREST HUNDREDTH OF A FOOT AND ALL ANGLES ARE MEASURED TO THE NEAREST SECOND THAT I HAVE FULLY COMPLIED WITH THE PROVISIONS OF CHAPTER 236 OF THE WISCONSIN STATUTES AND THE SUBDIVISION REGULATIONS OF THE TOWN OF BELOIT, TOWNSHIP OF BELOIT AND ROCK COUNTY IN HERETO, DIVIDING AND MAPPING THE SAME.  
 GIVEN UNDER MY HAND AND SEAL THIS 14<sup>TH</sup> DAY OF JANUARY 1971 AT BELOIT, WIS.

REVISED THIS 1<sup>ST</sup> DAY OF FEBRUARY, 1971.  
 REVISED THIS 15<sup>TH</sup> DAY OF JUNE, 1971.  
 REVISED THIS 21<sup>ST</sup> DAY OF JUNE, 1971.



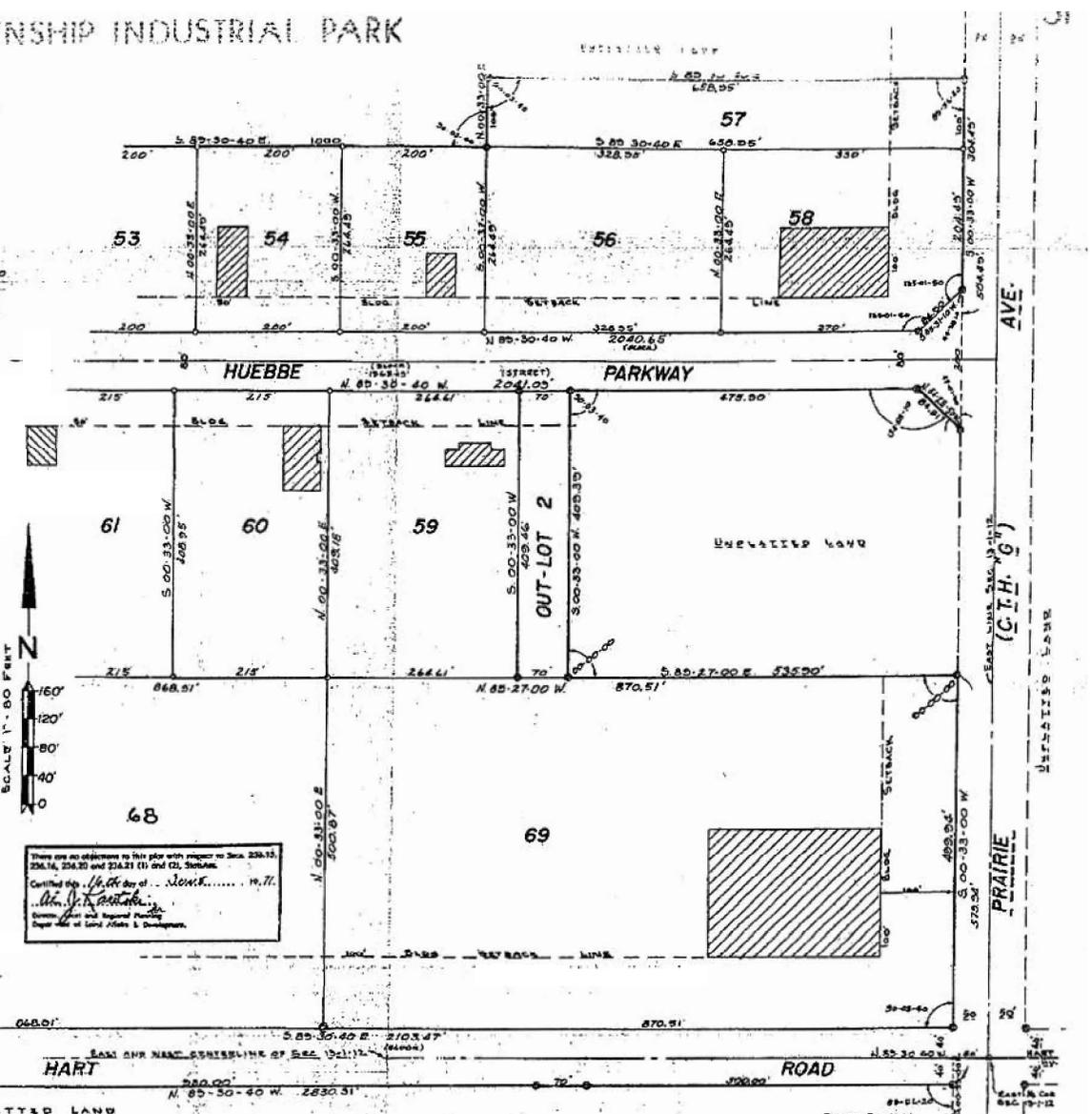
## COUNTY TREASURER CERTIFICATE

STATE OF WISCONSIN) ss I, OTIS P. THORMAN, BEING THE NOW ELECTED, QUALIFIED AND ACTING TREASURER OF ROCK COUNTY DO HEREBY CERTIFY THAT IN ACCORDANCE WITH THE RECORDS OF MY OFFICE THERE ARE NO UNREDEEMED TAX SALES, AND NO UNPAID TAXES OR SPECIAL ASSESSMENTS AS OF JANUARY 23, 1971 AFFECTING THE LANDS IN THE PLAT OF BELOIT TOWNSHIP INDUSTRIAL PARK.



## REGISTERS OFFICE, ROCK COUNTY, WIS.

DOCUMENT NO. \_\_\_\_\_ RECEIVED FOR RECORD THIS \_\_\_\_\_ DAY BY \_\_\_\_\_  
 A.D. 1971 AT \_\_\_\_\_ M. AND RECORDS IN VOLUME \_\_\_\_\_ PAGE \_\_\_\_\_ OF PLAT \_\_\_\_\_



There are no objections to this plat with respect to Secs. 236-15, 236-16, 236-20 and 236-21 (1) and (2), Statutes.  
 Certified this 14<sup>th</sup> day of January, 1971.  
 John J. Lee  
 Surveyor and Registered Planner  
 Dept. 402 of Land Title & Development

I hereby certify that I have on this 14<sup>th</sup> day of January, 1971, microphotographed the foregoing and above described document in accordance with standards established by Sec. 236.05(1) of the Statutes and when established procedures.  
 Camera Operator

There are no objections to this plat with respect to Sects. 23&13, 23&14, 23&15 and 23&16 (1) and (2), Section 112C.

Witness my hand and official seal this 14th day of June, 1950.

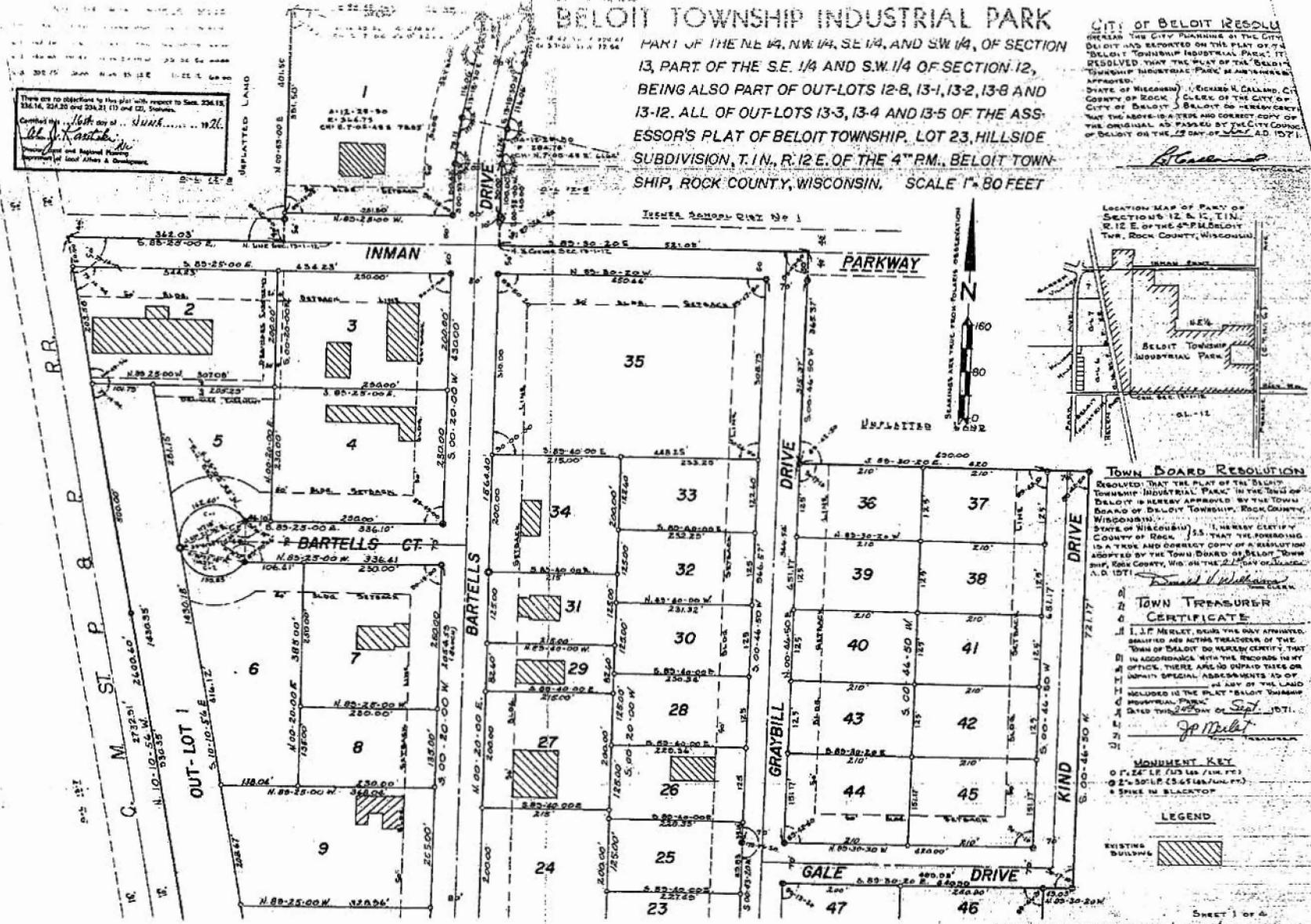
*Blair K. Kautz*  
 Surveyor and Registered Planning  
 Department of Land Affairs & Development

**BELOIT TOWNSHIP INDUSTRIAL PARK**  
 PART OF THE NE 1/4, NW 1/4, SE 1/4, AND SW 1/4, OF SECTION 13, PART OF THE S.E. 1/4 AND S.W. 1/4 OF SECTION 12, BEING ALSO PART OF OUT-LOTS 12-8, 13-1, 13-2, 13-8 AND 13-12. ALL OF OUT-LOTS 13-3, 13-4 AND 13-5 OF THE ASS-ESSOR'S PLAT OF BELOIT TOWNSHIP. LOT 23, HILLSIDE SUBDIVISION, T. 1 N., R. 12 E. OF THE 4<sup>TH</sup> RM., BELOIT TOWNSHIP, ROCK COUNTY, WISCONSIN. SCALE 1" = 80 FEET

**CITY OF BELOIT RESOLU**  
 WHEREAS THE CITY PLANNING BY THE CITY OF BELOIT HAS REPORTED ON THE PLAT OF A "BELOIT TOWNSHIP INDUSTRIAL PARK"; IT IS HEREBY APPROVED BY THE CITY OF BELOIT, WISCONSIN.

IN WITNESS WHEREOF, I, EDWARD H. CALLAND, CITY CLERK OF BELOIT, ROCK COUNTY, WISCONSIN, DO HEREBY CERTIFY THAT THE ABOVE IS A TRUE AND CORRECT COPY OF THE ORIGINAL AS PASSED BY THE CITY COUNCIL OF BELOIT ON THE 22<sup>ND</sup> DAY OF MAY, A.D. 1951.

*Edward H. Calland*  
 City Clerk



**TOWN BOARD RESOLUTION**  
 RESOLVED THAT THE PLAT OF THE BELOIT TOWNSHIP INDUSTRIAL PARK IN THE TOWN OF BELOIT IS HEREBY APPROVED BY THE TOWN BOARD OF BELOIT TOWNSHIP, ROCK COUNTY, WISCONSIN.

IN WITNESS WHEREOF, I, HERBERT CLIFTON, TOWN CLERK OF BELOIT, ROCK COUNTY, WISCONSIN, DO HEREBY CERTIFY THAT THE ABOVE IS A TRUE AND CORRECT COPY OF A RESOLUTION ADOPTED BY THE TOWN BOARD OF BELOIT TOWNSHIP, ROCK COUNTY, WIS. ON THE 21<sup>ST</sup> DAY OF JUNE, A. D. 1951.

*Herbert Clifton*  
 Town Clerk

**TOWN TREASURER**  
**CERTIFICATE**  
 I, J. F. MERLEY, BEING THE ONLY APPOINTED, QUALIFIED AND ACTING TREASURER OF THE TOWN OF BELOIT, DO HEREBY CERTIFY THAT IN ACCORDANCE WITH THE PROVISIONS IN MY OFFICE, THERE ARE NO UNPAID TAXES OR UNPAID SPECIAL ASSESSMENTS AS OF THE 1<sup>ST</sup> DAY OF JULY OF THE LAND INCLUDED IN THE PLAT "BELOIT TOWNSHIP INDUSTRIAL PARK".

Dated this 20<sup>th</sup> day of Sept. 1951.

*J. F. Merley*  
 Town Treasurer

**MONUMENT KEY**  
 0 1/2" x 1/2" (2 1/2" x 1 1/2" x 1 1/2")  
 2" x 3/4" (5.0 x 1.875 x 1.875)  
 \* SPIKE IN BLACKTOP

**LEGEND**  
 EXISTING BUILDING

I hereby certify that I have on this 14th day of June, 1950, microphotographed the foregoing and above described documents in accordance with standards established by Sec. 223.05(1) of the Statutes and with established procedures.

*Blair K. Kautz*  
 Camera Operator





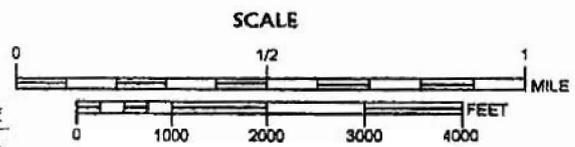
MODIFIED FROM  
U.S.G.S. 7.5'

BELONT, WIS.  
SECTION 4 JANESVILLE 1ST QUADRANGLE  
R 4250 - W 8500 7.5'

1962  
PHOTOREVISED 1971 AND 1976  
AP'S 3109 N 3E - 22PM 25 1000'



QUADRANGLE LOCATION



CONTOUR INTERVAL 10 FEET  
NATIONAL GEODETIC VERTICAL

Figure 2-1

DRAWN BY: JNC	DATE: 1/3/02	PROJ. NO. 912912
APP. BY: BEW	SCALE: 1"=2000'	DWG. NO. Y31912912

**BLACK and DECKER (U.S.) INCORPORATED**  
BELONT, WISCONSIN



**HERITAGE ENVIRONMENTAL SERVICES, LLC**  
INDIANAPOLIS, INDIANA

**SITE LOCATION MAP**

Map created Mon Aug 14 11:54:39 CDT 2006

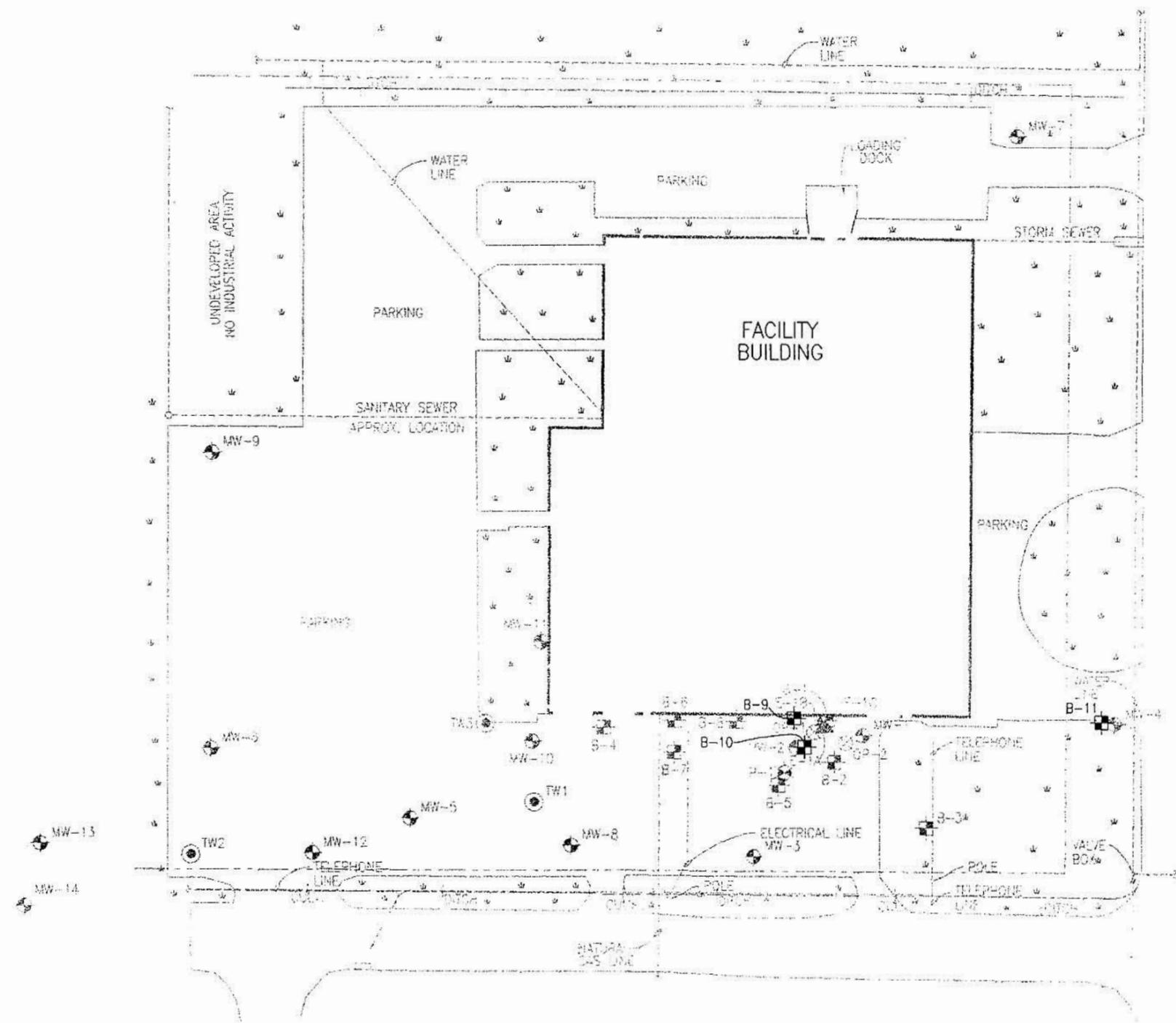
### Legend



- Sites Closed with Residual Contamination
  - Groundwater
  - Soil
  - Groundwater and Soil
- Offsource Contamination
- County Boundary
- 24K Open Water
- Municipalities

Scale: 1:3,644

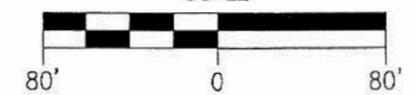
DO NOT USE FOR NAVIGATION



**LEGEND**

- GROUNDWATER MONITORING WELL LOCATION
- TEMPORARY GROUNDWATER WELLS
- SOIL VAPOR EXTRACTION WELL LOCATION
- OBSERVATION PROBE LOCATION
- PIEZOMETER LOCATION
- SOIL BORING LOCATION
- LAWN AREA
- PROPERTY LINE

**SCALE**



**TTE TRIAD ENGINEERING INCORPORATED**  
 325 East Chicago Street  
 Milwaukee, Wisconsin 53202  
 (414)-291-8840  
 FAX 291-8841

- MUNICIPAL ENGINEERING
- INDUSTRIAL PROCESSES
- REMEDIATION SERVICES
- ENVIRONMENTAL STUDIES
- AIR EMISSIONS ASSISTANCE
- WASTEWATER PRETREATMENT
- ENVIRONMENTAL COMPLIANCE
- CONSTRUCTION MANAGEMENT
- HAZARDOUS MATERIALS MANAGEMENT
- INFRASTRUCTURE SERVICES

**VERIFY SCALE**  
 BAR IS ONE INCH ON ORIGINAL DRAWING.  
 IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY.

DSGN	JMR				
DR	GJM				
CHK					
APVD					
NO.	DATE	REVISION	BY	APVD	

**BLACK & DECKER (U.S.) INC.**  
 BELOIT WISCONSIN

**SITE LAYOUT  
 "POST REMEDIAL SAMPLE LOCATIONS"**

SHEET NO.	
DWG NO.	05-TW993993
DATE	SEPT 2000
PROJ. NO.	TW993993

**1,4-Dioxane Monitoring Results  
Black & Decker Corporation  
Beloit Knife Works Facility**

Date	MW2	MW5	MW6	MW8	MW10	MW11	MW12	TW1	TW2	TW3	MW13	MW14	MW15
12/27/96	-	1200	-	-	NYI	NYI	NYI	NYI	NYI	NYI	NYI	NYI	NYI
3/31/97	-	1400	-	-	NYI	NYI	NYI	NYI	NYI	NYI	NYI	NYI	NYI
6/11/97	-	1600	-	-	NYI	NYI	NYI	NYI	NYI	NYI	NYI	NYI	NYI
9/4/97	-	2200	-	-	NYI	NYI	NYI	NYI	NYI	NYI	NYI	NYI	NYI
6/3/98	-	410	-	-	NYI	NYI	NYI	NYI	NYI	NYI	NYI	NYI	NYI
7/98	-		-	-	<40	<40	<40	<40	2900	<40	NYI	NYI	NYI
12/15/98	-	180	-	-	-	-	-	*	*	*	NYI	NYI	NYI
3/2/99	-	-	-	-	-	-	-	*	*	*	<10	<10	NYI
9/30/99	<100	310	<100	<100	<100	-	142	*	*	*	<100	<100	NYI
5/18/00	-	37	23	<3.5	7.6Q	-	15	*	*	*	<3.5	5.5Q	NYI
12/18/01	-	19	-	-	-	-	-	*	*	*	5.3	1.5	<0.44
4/27/03	-	6.8	10	-	-	-	7.3	*	*	*	2.2	<3.1	11

- Well not sampled for listed event.
- NYI Well not installed at time of listed event.
- \* Temporary well removed after sampling.
- Q Concentration between the Limit of Detection (LOD) and Limit of Quantification (LOQ).

All results in micrograms per liter (ug/l).



**Summary of Detected Constituents  
April 24, 2003**

Parameter	Wells and Piezometers Sampled										
	MW-5	MW-6	MW-12	MW-13	MW-14	MW-15	P2	P3	P4	EQ Blank	Field Blank
1,4 Dioxane	6.8	10	7.3	2.2 Q	<3.1	11	<2.1	<2.1	<2.3	<2.1	<2.1
Trichloroethene	1.3 Q	1.1 Q	0.90 Q	0.94 Q	0.78 Q	0.92 Q	<0.48	<0.48	<0.48	<0.48	<0.48
Chloroform	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	4.4	4.1
Methylene Chloride	<0.43	0.43 Q	<0.43	0.65 Q	0.61 Q	<0.43	<0.43	<0.43	0.56 Q	0.90 Q	0.82 Q

All units are ug/L.

NM = Not Measured

Samples were tested by laboratory methods 8270C & 8260B.

Q = Reading between the Limit of Detection (LOD) & Limit of Quantification (LOQ).

Analysis included volatile & semi-volatile organic compounds

**SUMMARY OF PRE-REMEDIAL SOIL DATA**  
**BLACK & DECKER (U.S.) INC.**  
**BELOIT, WISCONSIN**

sample no.	S20	S21	S22	S1	S2	S3	S4	S5	S6	S7	S8	S9	S10	S11	S12	S13
date collected	4/7/92	4/7/92	4/7/92	4/7/92	4/7/92	4/7/92	4/7/92	4/7/92	4/7/92	4/7/92	4/7/92	4/7/92	4/7/92	4/7/92	4/7/92	4/7/92
depth (ft)	5-6	5-6	5-6	6	6	6	6	10	8	8	4	4	4	15	15	15
TRPH (mg/kg)	35,000	33,000	80	6,500	16,000	1,500	850	11	<5	<5	<5	<5	<5	<5	75	<5
DRO (mg/kg)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
VOCs (ug/kg)		NA														
benzene	<200*															
bromobenzene	16,000															
n-butylbenzene	31,000															
sec-butylbenzene	57,000															
tert-butylbenzene	<200															
2-chlorotoluene	20,000															
1,1-dichloropropene	490															
ethylbenzene	15,000															
isopropylbenzene	66,000															
p-isopropyltoluene	31,000															
n-propylbenzene	<200															
1,1,2,2-tetrachloroethane	<200															
1,2,4-trichlorobenzene	<200															
1,1,1-trichloroethane	<200															
1,1,2-trichloroethane	<200															
naphthalene	6,300															
tetrachloroethene	1,500															
toluene	1,500															
trichloroethene	<200															
1,2,4-trimethylbenzene	59,000															
1,3,5-trimethylbenzene	<200															
total xylenes	78,000															
PAHs (ug/kg)		NA														
acenaphthene	<8,500*															
bis(2-ethylhexyl)phthalate	4,900 J															
naphthalene	4,600 J															
Metals (mg/kg)		NA														
lead	97															
zinc	130															
aluminum	3,400															
barium	190															
beryllium	0.096															
cadmium	3															
calcium	2,700															
chromium	47															
cobalt	240															
copper	120															
iron	4,200															
magnesium	1,700															
manganese	87															
nickel	18															
potassium	590															
sodium	140															
titanium	65															
vanadium	25															

\* elevated detection limit due to matrix interference/sample concentration.

J analyte positively identified below the quantitation limit.

\*\*The analyte concentration was found to be outside of the established linear range of quantitation for this compound. The reported value is an approximation only.

SUMMARY OF PRE-REMEDIAL SOIL DATA  
BLACK & DECKER (U.S.) INC.  
BELOIT, WISCONSIN

sample no.	S20	S21	S22	S1	S2	S3	S4	S5	S6	S7	S8	S9	S10	S11	S12	S13
date collected	4/7/92	4/7/92	4/7/92	4/7/92	4/7/92	4/7/92	4/7/92	4/7/92	4/7/92	4/7/92	4/7/92	4/7/92	4/7/92	4/7/92	4/7/92	4/7/92
depth (ft)	5-6	5-6	5-6	6	6	6	6	10	8	8	4	4	4	15	15	15
TRPH (mg/kg)	35,000	33,000	80	6,500	16,000	1,500	850	11	<5	<5	<5	<5	<5	<5	75	<5
DRO (mg/kg)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
VOCs (ug/kg)		NA														
benzene	<200*															
bromobenzene	16,000															
n-butylbenzene	31,000															
sec-butylbenzene	57,000															
tert-butylbenzene	<200															
2-chlorotoluene	20,000															
1,1-dichloropropene	490															
ethylbenzene	15,000															
isopropylbenzene	66,000															
p-isopropyltoluene	31,000															
n-propylbenzene	<200															
1,1,2,2-tetrachloroethane	<200															
1,2,4-trichlorobenzene	<200															
1,1,1-trichloroethane	<200															
1,1,2-trichloroethane	<200															
naphthalene	6,300															
tetrachloroethene	1,500															
toluene	1,500															
trichloroethene	<200															
1,2,4-trimethylbenzene	59,000															
1,3,5-trimethylbenzene	<200															
total xylenes	78,000															
PAHs (ug/kg)		NA														
acenaphthene	<8,500*															
bis(2-ethylhexyl)phthalate	4,900 J															
naphthalene	4,600 J															
Metals (mg/kg)		NA														
lead	97															
zinc	130															
aluminum	3,400															
barium	190															
beryllium	0.096															
cadmium	3															
calcium	2,700															
chromium	47															
cobalt	240															
copper	120															
iron	4,200															
magnesium	1,700															
manganese	87															
nickel	18															
potassium	590															
sodium	140															
titanium	65															
vanadium	25															

\* elevated detection limit due to matrix interference/sample concentration.

J analyte positively identified below the quantitation limit.

\*\*The analyte concentration was found to be outside of the established linear range of quantitation for this compound. The reported value is an approximation only.

SUMMARY OF PRE-REMEDIAL SOIL DATA  
 BLACK & DECKER (U.S.) INC  
 BELOIT, WISCONSIN

sample no.	B1	B1	B2	B2	B-3	B-3	B-3
date collected	11/3/92	11/3/92	11/3/92	11/4/92	11/5/92	11/5/92	11/5/92
depth (ft)	13-15	35-37	9-11	19-21	5-7	13-15	19-21
<b>TRPH (mg/kg)</b>	4,400	48	<5	<5	<5	120	<5
<b>DRO (mg/kg)</b>	NA						
<b>VOCs (ug/kg)</b>	NA						
benzene							
bromobenzene							
n-butylbenzene							
sec-butylbenzene							
tert-butylbenzene							
2-chlorotoluene							
1,1-dichloropropene							
ethylbenzene							
isopropylbenzene							
p-isopropyltoluene							
n-propylbenzene							
1,1,2,2-tetrachloroethane							
1,2,4-trichlorobenzene							
1,1,1-trichloroethane							
1,1,2-trichloroethane							
naphthalene							
tetrachloroethene							
toluene							
trichloroethene							
1,2,4-trimethylbenzene							
1,3,5-trimethylbenzene							
total xylenes							
<b>PAHs (ug/kg)</b>	NA						
acenaphthene							
bis(2-ethylhexy)phthalate							
naphthalene							
<b>Metals (mg/kg)</b>	NA						
lead							
zinc							
aluminum							
barium							
beryllium							
cadmium							
calcium							
chromium							
cobalt							
copper							
iron							
magnesium							
manganese							
nickel							
potassium							
sodium							
titanium							
vanadium							

\* elevated detection limit due to matrix interference/sample concentration.

J analyte positively identified below the quantitation limit.

\*\*The analyte concentration was found to be outside of the established linear range of quantitation for this compound.

The reported value is an approximation only.

SUMMARY OF PRE-REMEDIAL SOIL DATA  
BLACK & DECKER (U.S.) INC  
BELOIT, WISCONSIN

sample no.	MW-1	MW-1	MW-1	MW-2	MW-2	MW-2	MW-3	MW-3	MW-3	MW-4	MW-4
date collected	11/4/92	11/4/92	11/4/92	11/3/92	11/3/92	11/3/92	3/11/93	3/11/93	3/11/93	3/12/93	3/12/93
depth (ft)	9-11	29-31	53-55	19-21	27-29	51-53	15-17	25-27	53-55	5-7	43-45
TRPH (mg/kg)	<5	<5	<5	<5	7,400	8,000	<5	<5	<5	<5	<5
DRO (mg/kg)	NA										
VOCs (ug/kg)	NA	NA	NA	NA	NA			ND		ND	
benzene						ND	ND		ND		ND
bromobenzene						140	ND		ND		ND
n-butylbenzene						ND	ND		ND		ND
sec-butylbenzene						1,300	ND		ND		ND
tert-butylbenzene						1,700	ND		ND		ND
2-chlorotoluene						450	ND		ND		ND
1,1-dichloropropene						ND	ND		ND		ND
ethylbenzene						ND	ND		ND		ND
isopropylbenzene						230	ND		ND		ND
p-isopropyltoluene						240	ND		ND		ND
n-propylbenzene						170	3		1.2		1.5
1,1,2,2-tetrachloroethane						350	ND		ND		ND
1,2,4-trichlorobenzene						560	ND		ND		ND
1,1,1-trichloroethane						1,300	ND		ND		ND
1,1,2-trichloroethane						370	ND		ND		ND
naphthalene						ND	ND		ND		ND
tetrachloroethene						5,000	ND		ND		ND
toluene						ND	ND		ND		ND
trichloroethene						7,000	ND		ND		ND
1,2,4-trimethylbenzene						420	ND		ND		ND
1,3,5-trimethylbenzene						1,200	ND		ND		ND
total xylenes						ND	ND		ND		ND
PAHs (ug/kg)	NA										
acenaphthene											
bis(2-ethylhexyl)phthalate											
naphthalene											
Metals (mg/kg)	NA										
lead											
zinc											
aluminum											
barium											
beryllium											
cadmium											
calcium											
chromium											
cobalt											
copper											
iron											
magnesium											
manganese											
nickel											
potassium											
sodium											
titanium											
vanadium											

\* elevated detection limit due to matrix interference/sample concentration.

J analyte positively identified below the quantitation limit.

\*\*The analyte concentration was found to be outside of the established linear range of quantitation for this compound. The reported value is an approximation only.

SUMMARY OF PRE-REMEDIAL SOIL DATA  
BLACK & DECKER (U.S.) INC  
BELOIT, WISCONSIN

sample no.	B-4	B-4	B-5	B-5	B-6	B-7	B-8
date collected	5/18/93	5/18/93	5/19/93	5/19/93	5/18/93	5/18/93	5/18/93
depth (ft)	21-23	51-53	25-27	51-53	6.2	6.5	5.5
TRPH (mg/kg)	<5	<5	<5	<5	<5	<5	<5
DRO (mg/kg)	NA						
VOCs (ug/kg)	ND	ND	ND	ND			ND
benzene					ND	ND	
bromobenzene					ND	ND	
n-butylbenzene					ND	ND	
sec-butylbenzene					ND	ND	
tert-butylbenzene					ND	ND	
2-chlorotoluene					ND	ND	
1,1-dichloropropene					ND	ND	
ethylbenzene					ND	ND	
isopropylbenzene					ND	ND	
p-isopropyltoluene					ND	ND	
n-propylbenzene					ND	ND	
1,1,2,2-tetrachloroethane					ND	ND	
1,2,4-trichlorobenzene					ND	ND	
1,1,1-trichloroethane					4.4	6.1	
1,1,2-trichloroethane					ND	ND	
naphthalene					ND	ND	
tetrachloroethene					ND	ND	
toluene					ND	ND	
trichloroethene					ND	ND	
1,2,4-trimethylbenzene					ND	ND	
1,3,5-trimethylbenzene					ND	ND	
total xylenes					ND	ND	
PAHs (ug/kg)	NA						
acenaphthene							
bis(2-ethylhexy)phthalate							
naphthalene							
Metals (mg/kg)	NA						
lead							
zinc							
aluminum							
barium							
beryllium							
cadmium							
calcium							
chromium							
cobalt							
copper							
iron							
magnesium							
manganese							
nickel							
potassium							
sodium							
titanium							
vanadium							

\* elevated detection limit due to matrix interference/sample concentration.

J analyte positively identified below the quantitation limit.

\*\*The analyte concentration was found to be outside of the established linear range of quantitation for this compound.

The reported value is an approximation only.

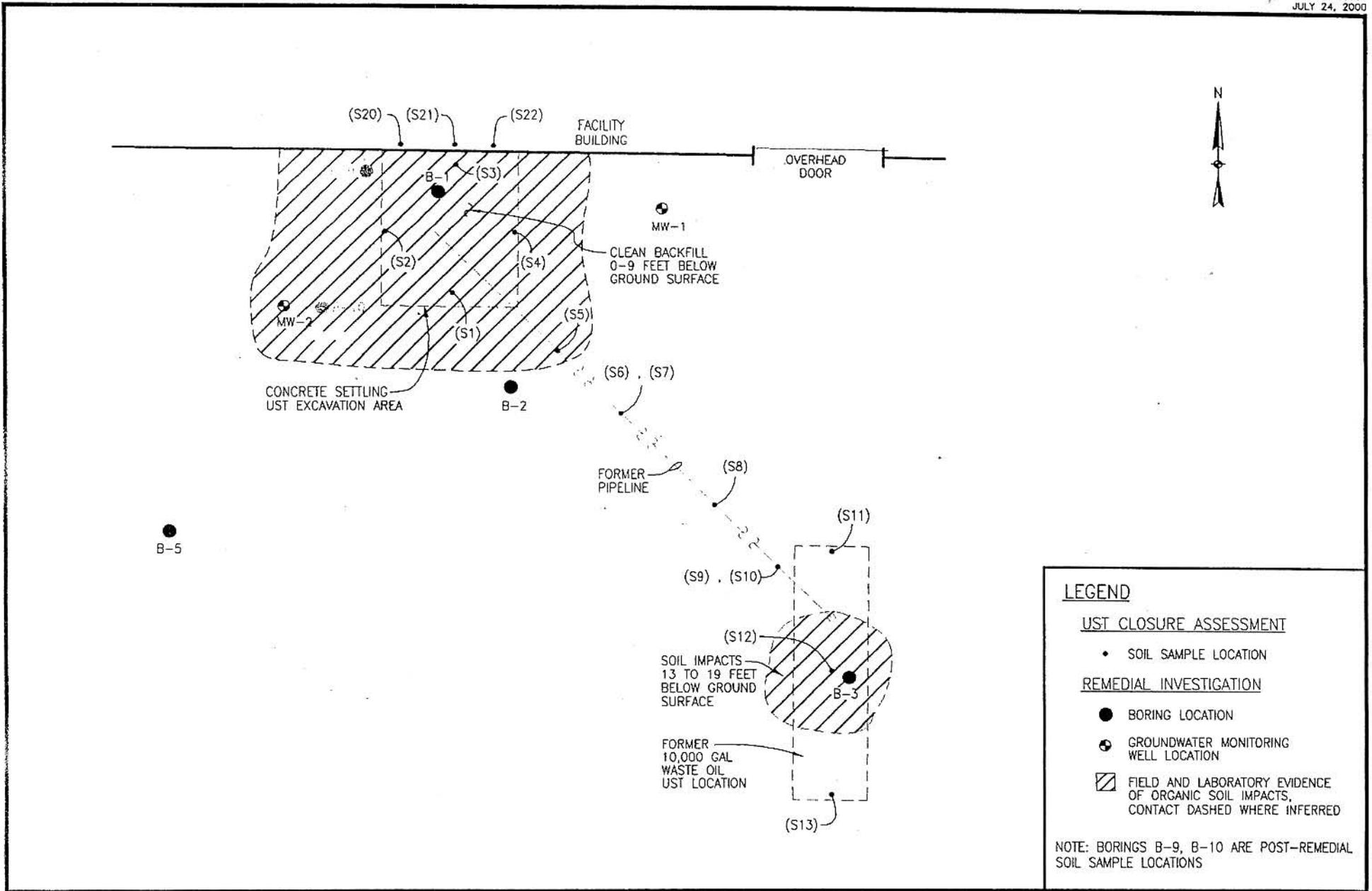
SUMMARY OF PRE-REMEDIAL SOIL DATA  
BLACK & DECKER (U.S.) INC  
BELOIT, WISCONSIN

sample no.	E1A	E1A	E1B	E1C	E1C
date collected	11/18/94	11/18/94	11/17/94	11/18/94	11/18/94
depth (ft)	41-43	54-56	15-17	24-26	32-34
TRPH (mg/kg)	NA	NA	NA	NA	NA
DRO (mg/kg)	ND	ND	1,100	780	200
VOCs (ug/kg)	ND			ND	ND
benzene		ND	ND		
bromobenzene		ND	ND		
n-butylbenzene		ND	ND		
sec-butylbenzene		ND	ND		
tert-butylbenzene		ND	ND		
2-chlorotoluene		ND	ND		
1,1-dichloropropene		ND	ND		
ethylbenzene		ND	ND		
isopropylbenzene		ND	ND		
p-isopropyltoluene		ND	600**		
n-propylbenzene		ND	ND		
1,1,2,2-tetrachloroethane		ND	ND		
1,2,4-trichlorobenzene		ND	ND		
1,1,1-trichloroethane		ND	86		
1,1,2-trichloroethane		ND	ND		
naphthalene		ND	ND		
tetrachloroethene		5.8	86		
toluene		ND	5.9		
trichloroethene		ND	ND		
1,2,4-trimethylbenzene		ND	ND		
1,3,5-trimethylbenzene		ND	ND		
total xylenes		ND	ND		
PAHs (ug/kg)		NA	NA	NA	NA
acenaphthene					
bis(2-ethylhexy)phthalate					
naphthalene					
Metals (mg/kg)		NA	NA	NA	NA

\* elevated detection limit due to matrix interference/sample concentration.

J analyte positively identified below the quantitation limit.

\*\*The analyte concentration was found to be outside of the established linear range of quantitation for this compound.  
The reported value is an approximation only.



**LEGEND**

UST CLOSURE ASSESSMENT

- SOIL SAMPLE LOCATION

REMEDIAL INVESTIGATION

- BORING LOCATION
- ⊙ GROUNDWATER MONITORING WELL LOCATION
- ▨ FIELD AND LABORATORY EVIDENCE OF ORGANIC SOIL IMPACTS, CONTACT DASHED WHERE INFERRED

NOTE: BORINGS B-9, B-10 ARE POST-REMEDIAL SOIL SAMPLE LOCATIONS

SUMMARY OF DETECTED CONSTITUENTS IN SOIL SAMPLES  
BLACK & DECKER (U.S) INC  
BELOIT, WISCONSIN

sample no.	post-remedial soil results		
	S20	B-9	B-11 background
date collected	4/7/92	9/18/97	9/18/97
depth (ft)	5-6	5-7	5-7
lab sample no.		872826-001	872826-007
TRPH (mg/kg)	35,000	NA	NA
DRO (mg/kg)	NA	220	NA
VOCs (ug/kg)			NA
bromobenzene	16,000	<25	
n-butylbenzene	31,000	<25	
sec-butylbenzene	57,000	<25	
2-chlorotoluene	20,000	<25	
1,4-dichlorobenzene	<200	54	
1,1-dichloroethane	490	<25	
ethylbenzene	15,000	<25	
isopropylbenzene	66,000	<25	
p-isopropyltoluene	31,000	<25	
naphthalene	8,300	97	
tetrachloroethene	1,500	<25	
toluene	1,500	<25	
1,2,4-trimethylbenzene	59,000	<25	
total xylenes	78,000	<25	
PAHs (ug/kg)			NA
acenaphthene	<8,500	470	
anthracene	<8,500	810	
benzo(a)anthracene	<8,500	2,800	
benzo(a)pyrene	<8,500	2,800	
benzo(b)fluoranthene	<8,500	2,600	
benzo(g,h,i)perylene	<8,500	1,300	
benzo(k)fluoranthene	<8,500	2,600	
chrysene	<8,500	2,900	
dibenzo(a,h)anthracene	<8,500	500	
fluoranthene	<8,500	6,000	
fluorene	<8,500	530	
indeno(1,2,3-cd)pyrene	<8,500	1,400	
naphthalene	J 4,600	260	
phenanthrene	<8,500	4,400	
pyrene	<8,500	5,200	
bis(2-ethylhexyl)phthalate	J 4,900	ND	NA
Metals (mg/kg)			
aluminum	3,400	3,300	7,500
barium	190	NA	NA
beryllium	0.096	NA	NA
cadmium	3	0.36	0.39
calcium	2,700	3,300	2,400
chromium (hexavalent)	47	NA	NA
cobalt	240	3.7	6.1
copper	120	6.7	16
iron	4,200	4,900	12,000
lead	97	7.3	9.7
magnesium	1,700	2,100	2,500
manganese	87	NA	NA
nickel	18	NA	NA
potassium	590	NA	NA
sodium	140	NA	NA
titanium	65	NA	NA
vanadium	25	7.4	14
zinc	130	24	42

sample no.	post-remedial soil results			
	B-9	-11background	B-9	B-9
date collected	9/18/97	9/18/97	9/18/97	9/18/97
depth (ft)	15-17	15-17	24-26	32-34
lab I.D. no.	872826-002	872826-008	872826-003	872826-004
DRO (mg/kg)	6,500	NA	780	680
VOCs (ug/kg)		NA		
n-butylbenzene	9,200		<25	<25
sec-butylbenzene	4,800		<25	<25
1,1-dichloroethane	710		<25	<25
ethylbenzene	1,100		<25	<25
isopropylbenzene	2,200		<25	<25
p-isopropyltoluene	1,700		<25	<25
n-propylbenzene	7,400		<25	<25
1,1,1-trichloroethane	10,000		<25	<25
naphthalene	11,000		<25	<25
tetrachloroethene	1,700		<25	<25
toluene	1,000		<25	<25
1,2,4-trimethylbenzene	41,000		<25	26
1,3,5-trimethylbenzene	13,000		<25	<25
total xylenes	5,400		<25	<25
PAHs (ug/kg)		NA		
acenaphthene	790		<14	<13
anthracene	1,100		<13	30
benzo(a)anthracene	1,300		<12	53
chrysene	1,100		<13	56
fluoranthene	3,200		<14	75
fluorene	960		<16	<16
1-methylnaphthalene	2,400		<16	17
2-methylnaphthalene	4,400		<15	25
naphthalene	9,900		<14	26
phenanthrene	4,900		<15	81
pyrene	2,600		<14	97
Metals (mg/kg)				
aluminum	3,000	1,300	1,100	900
cadmium	0.29	<0.26	0.34	0.29
calcium	1,300	61,000	74,000	130,000
cobalt	1.9	1.7	2.2	1.7
copper	5.1	7.1	5	4.4
iron	4,100	4,200	3,400	4,200
lead	4.7	2.1	5.1	2.7
magnesium	990	34,000	44,000	85,000
vanadium	7.2	6.4	5	4.1
zinc	280	10	16	18

# Elevated detection limit due to matrix interference and sample concentration  
J analyte positively identified below the quantitation limit.  
bis(2-ethylhexyl)phthalate is a common laboratory artifact.  
mg/kg - milligrams per kilogram.  
ug/kg - micrograms per kilogram.  
9/18/97 polynuclear aro means soil concentration exceeds generic or calculated residual contaminant level.  
9/18/97 VOC analytical denotes the applicable residual contaminant level (RCL).  
NA - not analyzed; ne - not established; nd - not determined  
1 - For reference information refer to Appendix F.  
means soil concentration exceeds generic or calculated residual contaminant level.  
denotes the applicable residual contaminant level (RCL).

sample no.	post-remedial			
	MW-2	B-10	MW-2	B-10
date collected	11/3/92	9/18/97	11/3/92	9/18/97
depth (ft)	27-29	27-29	51-53	53-55
lab. I.D. no.		872826-005		872826-006
TRPH (mg/kg)	7,400	NA	8,000	NA
DRO (mg/kg)	NA	860	NA	1,200
VOCs (ug/kg)	NA			
bromobenzene		<25	140	<25
sec-butylbenzene		<25	1,300	<25
tert-butylbenzene		<25	1,700	<25
2-chlorotoluene		<25	450	<25
1,4-dichlorobenzene		<25	<120	38
1,2-dichlorobenzene		<25	<120	110
isopropylbenzene		<25	230	<25
p-isopropyltoluene		<25	240	<25
n-propylbenzene		<25	170	<25
1,1,2,2-tetrachloroethane		<25	350	<25
1,2,4-trichlorobenzene		<25	560	270
1,2,3-trichlorobenzene		<25	<120	79
1,1,1-trichloroethane		<25	1,300	29
1,1,2-trichloroethane		<25	370	<25
naphthalene		1,100	<120	27
tetrachloroethene		<25	5,000	290
trichloroethene		<25	7,000	<25
1,2,4-trimethylbenzene		<25	420	<25
1,3,5-trimethylbenzene		<25	1,200	<25

**SUMMARY OF APPLICABLE INDUSTRIAL RESIDUAL CONTAMINANT LEVELS**

CONSTITUENT	DIRECT CONTACT (INGESTION)		INHALATION		PROTECTION OF GROUNDWATER	
	WDNR RCL	Calculated RCL	WDNR RCL	Calculated RCL	WDNR RCL	Calculated RCL
<b>Volatile Organic Compounds (mg/kg)</b>						
n-Butylbenzene	ne	4.09E+04	ne	nd	ne	nd
sec-Butylbenzene	ne	4.09E+04	ne	nd	ne	nd
tert-Butylbenzene	ne	4.09E+04	ne	nd	ne	nd
2-Chlorotoluene	ne	2.04E+04	ne	nd	ne	nd
1,2-Dichlorobenzene	ne	9.20E+04	ne	4.44E+02	ne	9.21E-01
1,4-Dichlorobenzene	ne	1.19E+02	ne	1.21E+03	ne	4.57E-01
1,1-Dichloroethane	ne	1.02E+05	ne	1.70E+03	ne	2.42E-01
Ethylbenzene	ne	1.02E+05	ne	5.13E+03	2.90E+00	1.04E+00
Isopropylbenzene	ne	nd	ne	nd	ne	nd
p-Isopropyltoluene	ne	nd	ne	nd	ne	nd
n-Propylbenzene	ne	4.09E+04	ne	nd	ne	nd
1,2,3-Trichlorobenzene	ne	nd	ne	nd	ne	nd
1,2,4-Trichlorobenzene	ne	1.02E+04	ne	1.01E+04	ne	2.20E+00
Tetrachloroethene	ne	5.50E+01	ne	1.87E+01	ne	4.94E-03
Trichloroethene	ne	5.81E+01	ne	3.68E+00	ne	1.95E-03
Toluene	ne	2.04E+05	ne	1.73E+03	1.50E+00	1.05E+00
1,1,1-Trichloroethane	ne	2.86E+05	ne	6.41E+03	ne	2.04E-01
1,1,2-Trichloroethane	ne	5.02E+01	ne	1.62E+00	ne	1.70E-03
1,2,4-Trimethylbenzene	ne	5.11E+04	ne	nd	ne	nd
1,3,5-Trimethylbenzene	ne	5.11E+04	ne	nd	ne	nd
Xylenes (total)	ne	2.04E+06	ne	nd	4.10E+00	9.26E+00
<b>Polyaromatic Hydrocarbons (mg/kg)</b>						
Acenaphthene	6.00E+04	6.13E+04	nd	nd	3.80E+01	1.41E+02
Anthracene	3.00E+05	3.07E+05	nd	nd	3.00E+03	1.52E+04
Benzo (a) anthracene	3.90E+00	3.92E+00	1.50E+02	1.72E+02	1.70E+01	2.76E+01
Benzo (b) fluoranthene	3.90E+00	3.92E+00	6.50E+01	6.47E+01	3.60E+02	3.61E+02
Benzo (k) fluoranthene	3.90E+01	3.92E+01	5.30E+03	5.26E+03	8.70E+02	8.65E+02
Benzo (a) pyrene	3.90E-01	3.92E-01	2.20E+01	8.83E+01	4.80E+01	8.45E+02
Benzo (g,h,i) perylene	3.90E+01	3.92E+01	7.70E+03	4.82E+03	6.80E+03	3.43E+03
Bis(2-ethylhexyl)phtalate	ne	2.04E+02	ne	nd	ne	1.39E+02
Dibenzo (a,h) anthracene	3.90E-01	3.92E-01	1.10E+02	1.25E+02	3.80E+01	6.91E+01
Chrysene	3.90E+02	3.92E+02	3.80E+03	3.78E+03	3.70E+01	3.64E+01
Fluoranthene	4.00E+04	4.09E+04	nd	nd	5.00E+02	8.75E+03
Fluorene	4.00E+04	4.09E+04	nd	nd	1.00E+02	2.26E+02
2-Methylnaphthalene	4.00E+04	2.04E+04	nd	nd	2.00E+01	7.78E+00
Ideno (1,2,3-cd) pyrene	3.90E+00	3.92E+00	7.50E+02	7.49E+02	6.80E+02	6.76E+02
Naphthalene	1.10E+02	2.04E+04	1.10E+02	4.74E+01	4.00E-01	7.04E-01
Phenanthrene	3.90E+02	3.92E+02	1.10E+03	1.10E+03	1.80E+00	9.20E-01
Pyrene	3.00E+04	3.07E+04	nd	nd	8.70E+03	1.05E+04
<b>Metals (mg/kg)</b>						
Barium	ne	7.15E+04	ne	nd	ne	6.53E+04
Beryllium	ne	2.04E+03	ne	nd	ne	7.61E+03
Cadmium	5.10E+02	5.11E+02	ne	nd	ne	9.83E-01
Copper	ne	4.09E+04	ne	nd	ne	nd
Hexavalent Chromium	2.00E+02	3.07E+03	ne	nd	ne	nd
Lead	5.00E+02	nd	ne	nd	ne	nd
Manganese	ne	2.04E+04	ne	nd	ne	nd
Nickel	ne	2.04E+04	ne	nd	ne	2.03E+04
Zinc	ne	3.07E+05	ne	nd	ne	1.64E+05
Diesel Range Organics (mg/kg)	ne	nd	ne	nd	100	nd

**NOTES:**

ne - not established

nd - not determined due to insufficient information (e.g. organic carbon:water partitioning coefficient).

RCLs - NR 720 Wisconsin Administrative Code (WAC) residual contaminant levels

WDNR RCLs are referenced from NR 720 WAC or calculated using WDNR default values and algorithms presented in the WDNR's interim guidance *Soil Cleanup Levels for PAHs* (April 1997).

designates the applicable RCL.

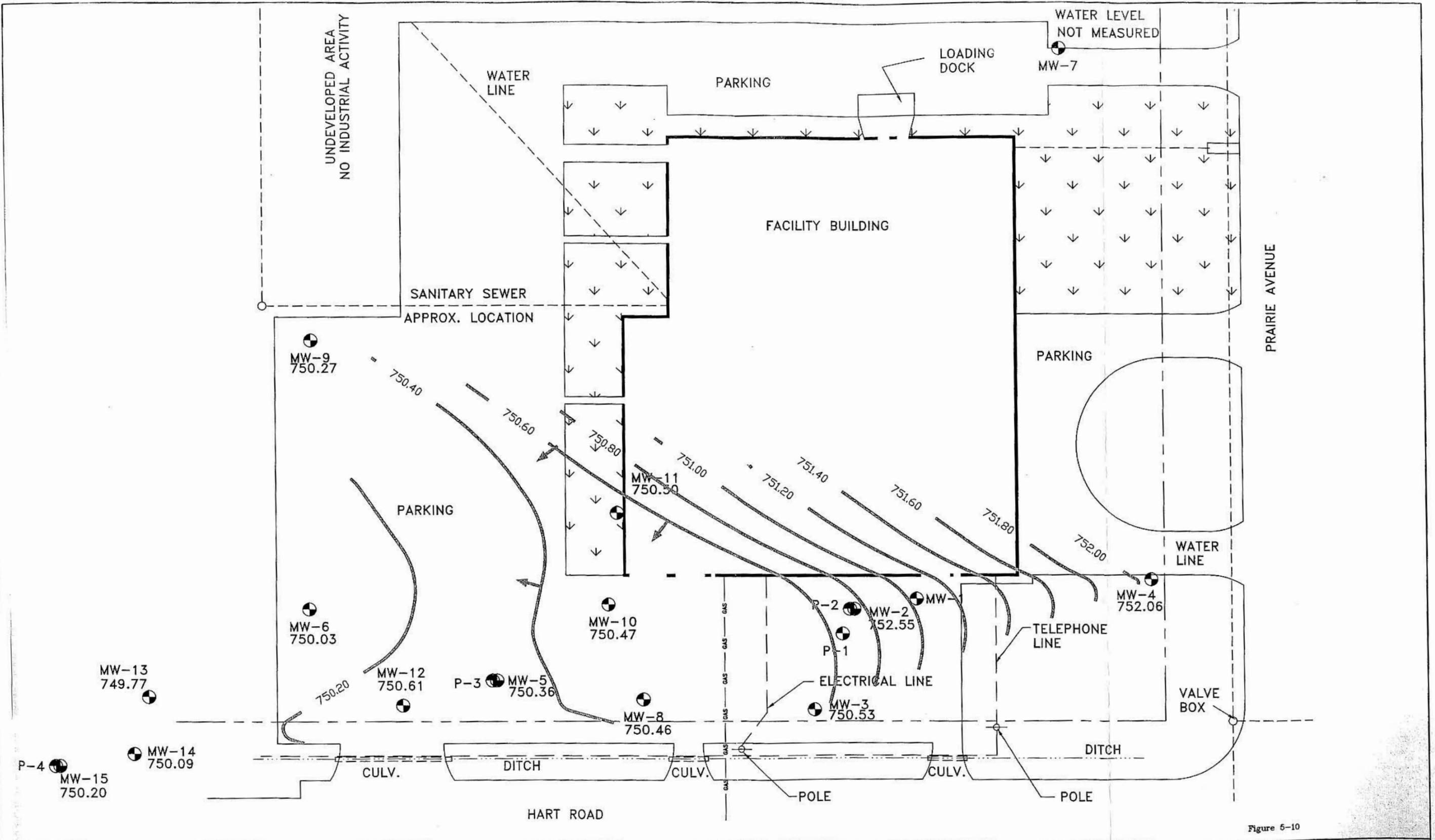


Figure 5-10

**NOTES:**

- ↘ Contour Interval 0.2 ft.
- ↘ Groundwater Flow Direction.

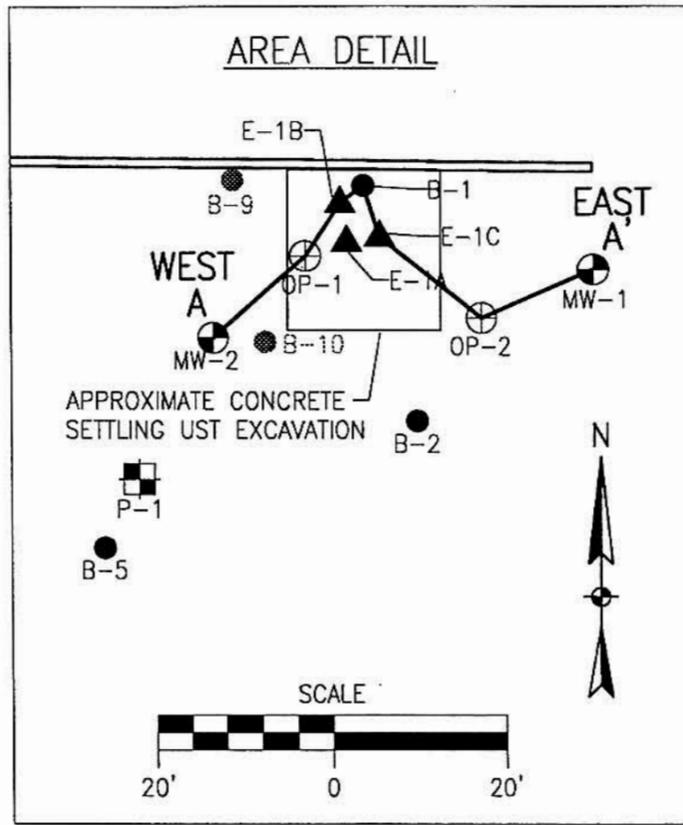
REVISIONS



HERITAGE ENVIRONMENTAL SERVICES, LLC  
INDIANAPOLIS, INDIANA

BLACK & DECKER (U.S.) INC. BELOIT WISCONSIN			
POTENTIOMETRIC SURFACE MAP APRIL 23, 2003			
DRAWN BY JNC	DATE July 9, 2003	PROJ. NO. 912704	DWG. NO. ACO4912704
APPROVED BY BEW	SCALE 1"=80'		

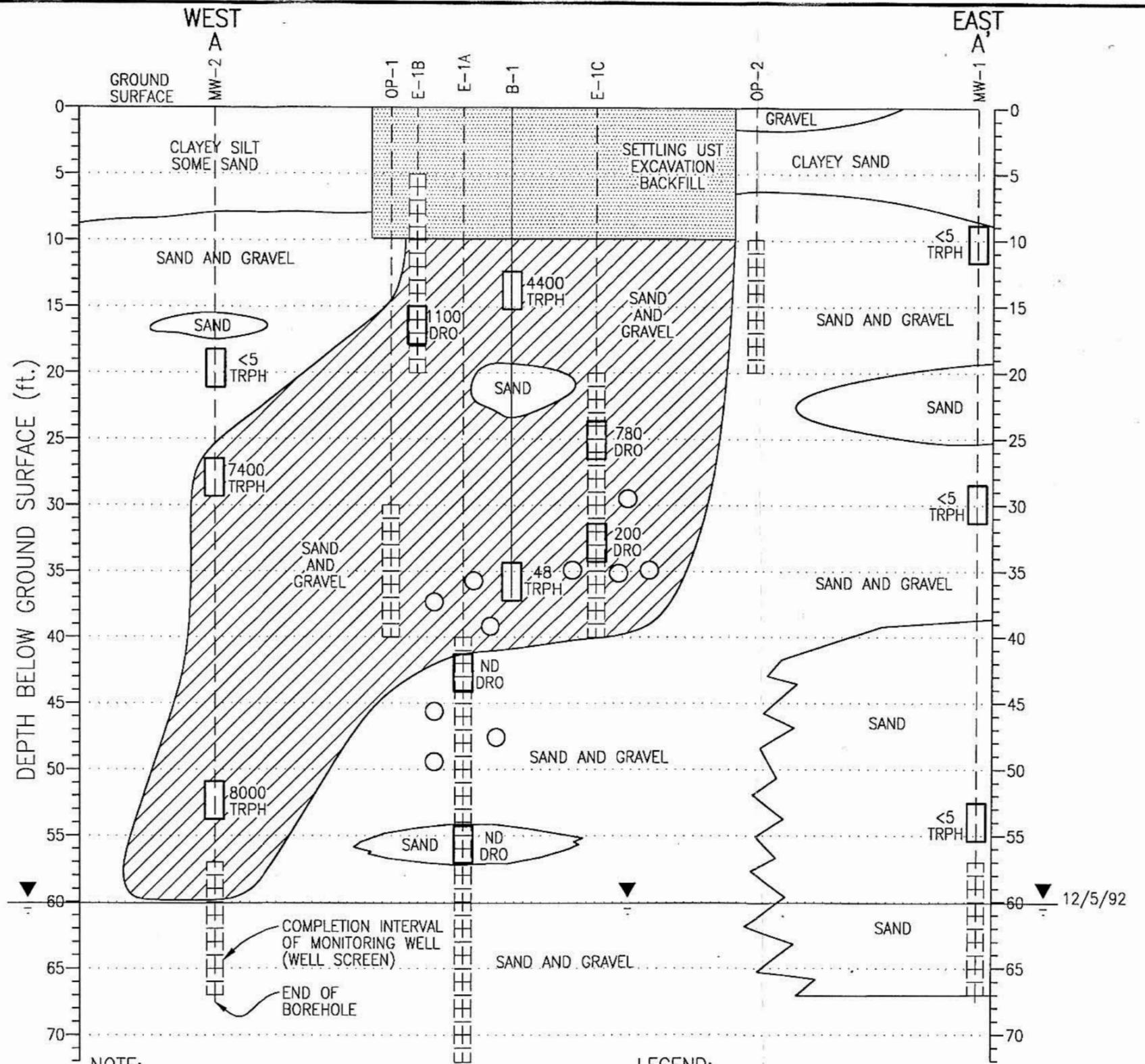
J:\Projects\TW993993\10-TW993993.dwg Fri Sep 15 09:01:09 2000 GJM



**LEGEND**

- ▲ SOIL VAPOR EXTRACTION WELL LOCATION
- ⊕ OBSERVATION PROBE LOCATION
- ⊠ PIEZOMETER LOCATION
- GROUNDWATER MONITORING WELL LOCATION
- BORING LOCATION
- COBBLES
- TRPH TOTAL RECOVERABLE PETROLEUM HYDROCARBONS CONCENTRATIONS IN MILLIGRAMS PER KILOGRAM (mg/kg)
- DRO DIESEL RANGE ORGANICS (mg/kg)
- ND NOT DETECTED

NOTE: BORINGS B-9, B-10 ARE POST-REMEDIAL SOIL SAMPLE LOCATIONS



**NOTE:**

1. SUBSURFACE CONDITIONS ARE INFERRED BETWEEN BORINGS AND MAY NOT REPRESENT ACTUAL CONDITIONS.

**LEGEND:**

▨ FIELD AND LABORATORY EVIDENCE OF ORGANIC SOIL IMPACTS, CONTACT DASHED WHERE INFERRED

APPROX. SCALE:  
HORIZONTAL - 1/64" = 1'  
VERTICAL - 1/64" = 1'

**TRIAD ENGINEERING INCORPORATED**  
325 East Chicago Street  
Milwaukee, Wisconsin 53202  
(414)-291-8840  
FAX 291-8841

- MUNICIPAL ENGINEERING
- INDUSTRIAL PROCESSES
- REMEDIATION SERVICES
- ENVIRONMENTAL STUDIES
- AIR EMISSIONS ASSISTANCE
- WASTEWATER PRETREATMENT
- ENVIRONMENTAL COMPLIANCE
- CONSTRUCTION MANAGEMENT
- HAZARDOUS MATERIALS MANAGEMENT
- INFRASTRUCTURE SERVICES

**VERIFY SCALE**  
BAR IS ONE INCH ON ORIGINAL DRAWING.  
IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY.

DSGN	JMR				
DR	GJM				
CHK					
APVD					
NO.	DATE	REVISION	BY	APVD	

**BLACK & DECKER (U.S.) INC.**  
BELOIT, WISCONSIN

**PRE-REMEDIAL CROSS SECTION**

SHEET NO.	10-TW993993
DATE	JULY 2000
PROJ. NO.	TW993993

**Ground Water Elevation Table  
Black & Decker  
Beloit, Wisconsin**

	MW-1	MW-2	P-2	MW-3	MW-4	MW-5	P-3	MW-6	MW-7	MW-8	MW-9	MW-10	MW-11	MW-12	MW-13	MW-14	MW-15	P-4
<b>03-Jun-98</b>	750.51	750.26	NYI	750.15	750.34	750.01	NYI	749.71	750.60	750.09	749.97	NM	NM	NM	NYI	NYI	NYI	NYI
<b>15-Dec-98</b>	751.59	751.33	NYI	751.22	751.49	751.02	NYI	750.68	751.69	751.13	750.91	751.12	751.16	750.95	NYI	NYI	NYI	NYI
<b>30-Sep-99</b>	*	*	NYI	*	*	*	NYI	*	*	*	*	*	*	*	*	*	NYI	NYI
<b>18-May-00</b>	751.06	751.05	NYI	NM	750.93	750.54	NYI	750.20	NM	750.63	NM	750.63	750.69	750.48	749.92	750.24	NYI	NYI
<b>17-Dec-01</b>	752.83	752.55	752.90	752.44	753.03	752.24	752.44	751.91	NM	752.35	752.13	752.36	752.36	752.18	751.62	751.94	752.05	752.17
<b>23-Apr-03</b>	NM	750.60	750.97	750.53	752.06	750.36	750.59	750.03	NM	750.46	750.27	750.47	750.50	750.61	749.77	750.09	750.20	750.35

NYI - Indicated well not installed at time of depth to water measurement.

\* - Analytic data available for this monitoring date but no water elevation measurement provided.

NM - Depth to water not measured on indicated date.

**HERITAGE ENVIRONMENTAL SERVICES, LLC**



7901 West Morris Street  
Indianapolis, IN 46231  
Phone: 317/243-0811  
Fax: 317/486-5095  
Internet: <http://www.heritage-enviro.com>

September 4, 2003

Mr. Howard Hemmer  
Town of Beloit  
2871 South Afton Road  
Beloit, Wisconsin 53511

**Re: Notification Letter, Former  
Black & Decker Facility  
2710 Prairie Avenue**

Dear Mr. Hemmer:

This correspondence is inform you that trace concentrations of organic compounds were detected in ground water samples collected from monitoring well MW-15 installed in the right-of-way of Hart Road adjacent to the former Black & Decker facility at 2710 Prairie Avenue. Heritage Environmental Services, LLC supervised the installation of this well in December 2001. A copy of the notification transmittal to obtain your approval prior to the installation is attached. This notification is part of the process required by the Wisconsin Department of Natural Resources to "close" the site.

The volatile organic compound trichloroethene was detected in the ground water sample at a concentration of 0.92 parts per billion. The Federal Drinking Water Standard for this compound is 5 parts per billion. The semi-volatile organic compound 1,4-dioxane was present at a concentration of 11 parts per billion. A Federal Drinking Water Standard has not been established for 1,4-dioxane. As the water table is approximately fifty (50) feet below the ground surface, the trace concentrations of organic compounds in the ground water will in no way impair use, maintenance or construction activities along Hart Road.

Upon receiving closure approval by the Wisconsin Department of Natural Resources, the wells will be plugged and abandoned per WDNR regulations. If you have questions regarding this letter, please contact me at (317) 486-2780.

Sincerely,

Heritage Environmental Services, LLC

Bruce R. Winningham  
Senior Project Geologist

cc: Randy Maass  
Dave Johnson

Document Number	DEED RESTRICTION
<u>Declaration of Restrictions</u>	
<p>In Re: LOT 69, BELOIT TOWNSHIP INDUSTRIAL PARK, TOWN OF BELOIT, ROCK COUNTY WISCONSIN, ACCORDING TO THE RECORDED PLAT THEREOF.</p>	
Recording Area	
Name and Return Address	

*form 9-2000 submitted*

STATE OF WISCONSIN

COUNTY OF ROCK

WHEREAS, Black & Decker (U.S.) Incorporated is the owner of the above-described property.

WHEREAS, one or more waste cutting oil/petroleum-based liquid discharges have occurred on this property. Waste cutting oil/petroleum-based liquid-contaminated soil remains on this property at the following location: Former location of the waste cutting oil underground storage tank system, which is outside of the building, along the south building wall, and west of the east overhead door.

Parcel Identification Number (PIN): 6-2-449.A69

WHEREAS, it is the desire and intention of the current property owner to impose on the property certain restrictions due to the inability to conduct further soil remediation activities on the property at the present time.

NOW THEREFORE, the owner hereby declares that all of the property described above is held and shall be held, conveyed or encumbered, leased, rented, used, occupied and improved subject to the following limitation and restrictions:

- (1): **Structural impediments existing at the time of clean-up (building wall and foundation is immediately adjacent to the former location of the waste cutting oil underground storage tank (UST) system) make complete remediation of the soil contamination on this property impracticable.**

If the structural impediments on this property that are described above are removed, the property owner who does so shall conduct an investigation of the degree and extent of (waste cutting oil/petroleum based liquid) contamination. To the extent that contamination is found at that time, the Wisconsin Department of Natural Resources (WDNR) shall be immediately notified and the contamination shall be properly remediated in accordance with applicable statutes and rules. If the currently inaccessible contaminated soil that remains on the property is excavated in the future, it will have to be sampled and analyzed and the treatment or disposal of the soil as a solid or hazardous waste may be necessary.

- (2): **An industrial residual contaminant level (RCL) in Table 2 in s. NR 720.11, Wis. Adm. Code, has been applied to soil remediation at the site.**

Select volatile organic compounds (VOCs), polynuclear aromatic hydrocarbons (PAHs), and diesel range organics (DRO) remain in soil at concentrations above default and calculated industrial RCLs, which were developed in accordance with Chapter NR 720 Wis. Adm. Code and applicable WDNR guidance. RCLs for protection of groundwater and human exposure via direct contact for industrial sites were exceeded at sample locations in the area of the source (former waste cutting oil UST system).

The property described above may not be used or developed for a residential, commercial, agricultural or other non-industrial use, unless (at the time that the non-industrial use is proposed) an investigation is conducted to determine the degree and extent of waste cutting oil/petroleum based liquid contamination that remains on the property and remedial action is taken as necessary to meet all applicable non-industrial soil cleanup standards. If contaminated soil that remains on the property is excavated in the future, it will have to be sampled and analyzed and the treatment or disposal of the soil as a solid or hazardous waste may be necessary.

- (3): **An engineered cap or cover is the selected remedial action to address residual soil contamination on the property. The site is currently paved.**

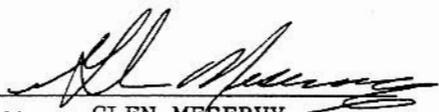
The following activities are prohibited on that portion of the property described above where a cap or cover has been placed {a map of the capped area is attached as Exhibit A}, unless prior written approval has been obtained from the WDNR or its successor or assign: (1) Excavating or grading of the land surface; (2) Filling on the capped area; (3) Plowing for

agricultural cultivation; and (4) Construction or installation of a building or other structure with a foundation that would sit on or be placed within the cap or cover.

This restriction is hereby declared to be a covenant running with the land and shall be fully binding upon all persons acquiring the above-described property whether by descent, devise, purchase, or otherwise. This restriction inures to the benefit of and is enforceable by the WDNR, its successors or assigns. The Department, its successors or assigns, may initiate proceedings at law or in equity against any person or persons who violate or are proposing to violate this covenant, to prevent the proposed violation or to recover damages for such violation.

Any person who is or becomes owner of the property described above may request that the Wisconsin Department of Natural Resources or its successor issue a determination that one or more of the restrictions set forth in this covenant is no longer required. Upon the receipt of such a request, the Wisconsin Department of Natural Resources shall determine whether or not the restrictions contained herein can be extinguished. If the Department determines that the restrictions can be extinguished, an affidavit, attached to a copy of the Department's written determination, may be recorded by the property owner or other interested party to give notice that this deed restriction, or portions of this deed restriction, are no longer binding.

IN WITNESS WHEREOF, the owner of the property has executed this Declaration of Restrictions, this 6 day of SEPTEMBER, 2000.

Signature:   
Printed Name: GLEN MESERVY

Subscribed and sworn to before me  
This 6 day of SEPTEMBER, 2000.

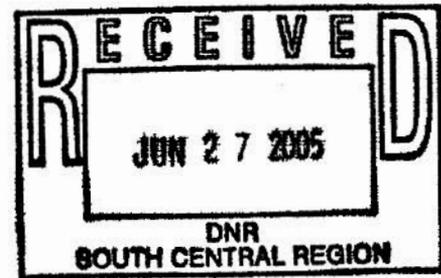
  
Notary Public, State of Wisconsin  
My commission 7-14-2002

03-54-001426  
Wisconsin Knife Works



330 North College Avenue  
Indianapolis, Indiana 46202  
(317) 685-6600 • Fax (317) 685-6610  
1-800-508-8034  
email: [keramida@keramida.com](mailto:keramida@keramida.com)  
web page: [www.keramida.com](http://www.keramida.com)

PAVEMENT MAINTENANCE PLAN  
BLACK & DECKER  
FORMER WISCONSIN KNIFE WORKS FACILITY  
2710 PRAIRIE AVENUE  
BELOIT, WISCONSIN  
BRRTS No. 03-54-001426



Submitted to:

Mr. Randy Maass  
WISCONSIN DEPARTMENT OF NATURAL RESOURCES  
South Central Region Headquarters  
3911 Fish Hatchery Road  
Fitchburg, Wisconsin 53711-5397

Submitted by:

**KERAMIDA ENVIRONMENTAL, INC.**  
330 North College Avenue  
Indianapolis, Indiana 46202  
317/685-6600

June 23, 2005

*Setting The Standard of Excellence*

---

ENGINEERS • HYDROGEOLOGISTS • SCIENTISTS • INDUSTRIAL HYGIENISTS • TOXICOLOGISTS  
HEADQUARTERS: INDIANAPOLIS, IN • OFFICES IN: COLUMBUS, OH • CINCINNATI, OH • SACRAMENTO, CA



330 North College Avenue  
Indianapolis, Indiana 46202  
(317) 685-6600 • Fax (317) 685-6610  
**1-800-508-8034**  
email: [keramida@keramida.com](mailto:keramida@keramida.com)  
web page: [www.keramida.com](http://www.keramida.com)

June 23, 2005

Mr. Randy Maass  
Wisconsin Department of Natural Resources  
South Central Region Headquarters  
3911 Fish Hatchery Road  
Fitchburg, Wisconsin 53711-5397

**CERTIFIED MAIL**  
**RETURN RECEIPT REQUESTED**  
Number 7000-0520-0015-8851-5007

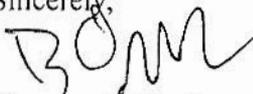
**Re: Pavement Maintenance Plan  
Black & Decker  
Former Wisconsin Knife Works Facility  
Beloit, Wisconsin**

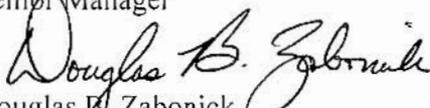
Dear Mr. Maass:

At the request of Black & Decker Corp., KERAMIDA Environmental Inc. (KERAMIDA) has prepared two (2) copies of the enclosed Pavement Maintenance Plan (PMP) for the above referenced facility.

We trust that this document will meet with your approval. Should you have any questions, please contact Mr. Opell at 317-685-8231 or [dao@keramida.com](mailto:dao@keramida.com) or Mr. David Johnson of Black & Decker at 317-334-7087.

Sincerely,

  
Douglas A. Opell  
Senior Manager

  
Douglas B. Zabornick  
Vice President, Engineering Operations

cc: Mr. David Johnson  
Black & Decker Corp.

*Setting The Standard of Excellence*

---

ENGINEERS • HYDROGEOLOGISTS • SCIENTISTS • INDUSTRIAL HYGIENISTS • TOXICOLOGISTS  
HEADQUARTERS: INDIANAPOLIS, IN • OFFICES IN: COLUMBUS, OH • CINCINNATI, OH • SACRAMENTO, CA



**KERAMIDA**  
ENVIRONMENTAL, INC.  
ENGINEERING • CONSULTING • REMEDIATION  
AIR • LAND • WATER • WASTE

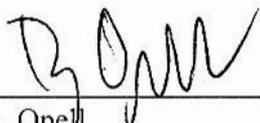
330 North College Avenue  
Indianapolis, Indiana 46202  
(317) 685-6600 • Fax (317) 685-6610  
**1-800-508-8034**  
email: [keramida@keramida.com](mailto:keramida@keramida.com)  
web page: [www.keramida.com](http://www.keramida.com)

**PAVEMENT MAINTENANCE PLAN  
FORMER WISCONSIN KNIFE WORKS  
BLACK & DECKER  
BELOIT, WISCONSIN**

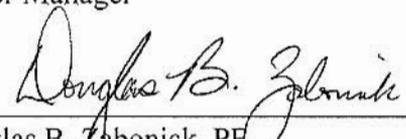
Submitted to: **WISCONSIN DEPARTMENT OF NATURAL RESOURCES**  
Mr. Randy Maass  
South Central Region Headquarters  
3911 Fish Hatchery Road  
Fitchburg, Wisconsin 53711-5397

Submitted by: **KERAMIDA ENVIRONMENTAL, INC.**  
330 North College Avenue  
Indianapolis, Indiana 46202  
317/685-6600

Prepared by:

  
\_\_\_\_\_  
Douglas A. Opel  
Senior Manager

Reviewed by:

  
\_\_\_\_\_  
Douglas B. Zabonick, PE  
Vice President, Engineering Operations

June 23, 2005

*Setting The Standard of Excellence*

---

ENGINEERS • HYDROGEOLOGISTS • SCIENTISTS • INDUSTRIAL HYGIENISTS • TOXICOLOGISTS  
HEADQUARTERS: INDIANAPOLIS, IN • OFFICES IN: COLUMBUS, OH • CINCINNATI, OH • SACRAMENTO, CA

To the best of my knowledge and belief, the stated legal description, GIS coordinates and copy of the plat are correct for the former Black & Decker facility located at 2710 Prairie Avenue, in Beloit, Wisconsin.

 representing Black & Decker.  
(signature)

#### EXECUTIVE SUMMARY

KERAMIDA Environmental, Inc. (KERAMIDA) has prepared this Pavement Maintenance Plan (PMP) for the former Black & Decker, Inc., Knife Works Facility in Beloit, Wisconsin. The facility, located at 2710 Prairie Avenue, Beloit, Wisconsin 53511 (Site) was the subject of environmental investigations and remediation since the early 1990's. After the investigation and remediation efforts were completed, some impacted soils adjacent to the building foundation remained in place. These impacted soils are above the Wisconsin Department of Natural Resources (WDNR) cleanup criteria. The area is covered by an asphalt parking lot and the WDNR provided conditional closure of the Site; a condition of the closure was a plan for maintaining the asphalt pavement cover over the area where impacted soils remain.

This PMP describes inspection and maintenance activities to provide proper care of the asphalt cover.

**PAVEMENT MAINTENANCE PLAN  
BLACK & DECKER  
FORMER WISCONSIN KNIFE WORKS FACILITY  
2710 PRAIRIE AVENUE  
BELOIT, WISCONSIN  
BRRTS No. 03-54-001426**

**1.0 INTRODUCTION**

KERAMIDA Environmental, Inc. (KERAMIDA) has prepared this Pavement Maintenance Plan (PMP) for the former Black & Decker, Inc., Knife Works Facility in Beloit, Wisconsin. The facility, located at 2710 Prairie Avenue, Beloit, Wisconsin 53511 (Site) was the subject of environmental investigations and remediation since the early 1990's. After the investigation and remediation efforts were completed, some impacted soils adjacent to the building foundation remained in place. These impacted soils near the building were above the Wisconsin Department of Natural Resources (WDNR) cleanup criteria. The area is covered by an asphalt parking lot and the WDNR provided Conditional Case Closure of the Site; a condition of the closure was a plan for maintaining the asphalt barrier over the area where impacted soils remain.

This PMP describes inspection and maintenance activities for the asphalt barrier. This PMP applies only to the area of the asphalt parking lot where soil impact above WDNR cleanup levels has been noted.

## 2.0 PROJECT BACKGROUND

The Site formerly manufactured metal saw blades for electric circular saws. The facility closed in 2001 and is no longer owned or operated by Black & Decker.

Over the course of several years of operations, cutting oils and some solvents were used at the Site. After release of fluids was discovered in the 1990's, Black & Decker contracted with a local environmental consulting firm to conduct investigations and implement remediation.

The remediation included the removal of soils and the operation of a Soil Vapor Extraction (SVE) system. After several years of operation and ground water monitoring, the Wisconsin Department of Natural Resources (WDNR) issued a Conditional Case Closure letter dated October 20, 2003. The WDNR closure condition included a restriction on the property to maintain an impermeable surface barrier over the remaining soil contamination in the vicinity of the former waste-oil settling tank to prevent it from impacting human health and the environment. The WDNR specified that the "barrier must extend from the edge of the building to the southern edge of the property and at least 20 feet east and west of the margins of the settling tank excavation (particularly beyond B-9, B-10 and MW-2)" (WDNR, 2003). This PMP pertains solely to this portion of the Site (Figure 1).

### 3.0 ASPHALT PAVEMENT

The Site area required to have an impervious barrier is currently an asphalt paved parking lot. The surface drainage is sloped away from the building toward West Hart Road to the south.

Maintenance of an impervious barrier for this Site will require the maintenance of the asphalt pavement. The traffic loading in the area requiring a barrier is restricted to passenger vehicles and light truck delivery, such as ground transportation deliveries of packages (*e.g.*, UPS/FedX). Truck deliveries and shipping that would display higher weight and impart a higher level of stress loading to the parking lot do not take place in the area requiring the impervious barrier. Loading docks for these activities are on the far north side of the facility.

Asphalt pavements require maintenance over time, but maintenance of asphalt is easily accomplished and contractors that maintain asphalt pavement are widely available. The critical factors involved with asphalt maintenance include: (1) proper drainage (2) inspection and evaluation, and (3) repair.

#### 3.1 Proper Drainage

One of the important factors of asphalt endurance is the drainage of water to prevent puddling of water on the asphalt surface. Other factors pertaining to drainage include the nature of underlying soils. The slope of the asphalt surface at the Site is away from the building toward West Hart Road to the south. Maintenance of the slope of the area for the barrier should be checked to prevent puddling and possible infiltration of excess moisture to the underlying soil.

Although most of the traffic load stress in a parking lot is absorbed by the asphalt pavement, underlying soils also typically absorb some of the stress or load. If the moisture content of the soils is too high as may be associated with fine-grained soils, such as silt and clay, the underlying soils may deform, resulting in weakened asphalt. Maintenance of a slope to enhance runoff is the primary means of preventing puddling and/or possible water infiltration.

As noted previously, vehicular traffic at the area of the Site of concern for maintenance is restricted to passenger vehicles and low-weight overnight delivery trucks (*e.g.*, UPS/FedX), so

stress loads will be low and excessive mechanical weakening of the asphalt would not be expected. Also, granular easily drained soils are present in the subsurface at the Beloit facility and excess moisture buildup in soils would not be expected.

### 3.2 Inspection and Evaluation

Evaluation of the area for the barrier should be conducted on an annual basis to provide assurance the pavement is providing an adequate barrier to infiltration. Inspections and evaluations should be conducted by walking over the area and noting the condition of the asphalt. Areas showing pavement distress should be noted and evaluated for potential corrective action.

Inspections should pay particular attention to the following asphalt pavement conditions (Asphalt Institute, 1975):

- Raveling – Raveling is a separation of the aggregate (rock) within the asphalt. Small pock marks may be visible, indicating small pieces of aggregate are becoming dissociated from the asphalt matrix. If allowed to progress without maintenance, raveling can progressively continue until larger particles of aggregate are broken free and the pavement will develop a rough or jagged appearance.
- Alligator Cracks – Alligator cracks are interconnected cracks forming small blocks which resemble alligator skin or chicken wire. Small areas are not uncommon but large areas of interconnected cracks can be of concern.
- Upheaval – This is the local displacement/breakup of pavement due to subsurface freeze/thaw of the subsurface soil.
- Pot Holes – These holes in pavement can result from lack of maintenance or other conditions that relate to improper asphalt design, insufficient thickness or poor drainage.
- Grade Depressions – Localized depressions in asphalt pavements can indicate a failure of subsurface materials to provide adequate support or poor placement of asphalt. Depressions in asphalt can result in cracking and infiltration.

Pavements can still be considered to be in good condition even if some of the above conditions are noted; it is a matter of degree and frequency of occurrence of the above features that help to

characterize the condition. Asphalt pavements may be described as fair condition if they are characterized by random cracks of up to ½ -inch in width and display raveled aggregate. Pavement in poor condition displays random cracks, raveled aggregate, depressions, local alligator areas, pot holes and upheaval.

In order to maintain an adequate barrier to minimize rainwater infiltration in the area of concern, the asphalt pavement at the Site should be maintained such that the pavement is in good condition and all cracks are repaired.

### **3.3 Maintenance**

Properly maintained asphalt surfaces will provide an impervious barrier and provide for a less costly life cycle expense than poorly maintained asphalt, which could require significant repair or repaving. The most common maintenance for asphalt pavements in good condition is the application of a light seal coat – including a fog seal or an emulsified asphalt slurry seal.

Seal coat is a thin asphalt surface treatment used to waterproof and improve the texture of asphalt pavements. A fog coat is a type of seal coat and is a light application of slow-setting emulsified asphalt diluted with water. Fog coats can be used to renew old asphalt surfaces and to seal small cracks and surface pocks. Curing time is an issue in parking lots for fog coat application. Fog coats typically take several hours to cure and alternative parking may be needed during the cure time. Emulsified asphalt slurry is a mixture of emulsified asphalt, fine aggregate, mineral filler, and water. It is sometimes mixed in a slurry machine that both mixes and spreads the material or may be pre-made and purchased in 5-gallon buckets and can be applied using a squeegee. Cleaning of all surfaces is needed to maximize the application of coatings.

Various maintenance options are available for pavements in fair or poor condition. Options range from filling larger cracks of (> 1/8-inch) with emulsified asphalt slurry, which can also be mixed with sand. Crack sealing can include routing out large cracks to create a reservoir and solid bonding surface, cleaning with compressed air, drying with a heat lance to remove moisture, and finally filling with a sealant and overbanding of the area. Mud, grass, or weeds in small cracks should be removed prior to filling.

In some cases, hot mix asphalt (HMA) may be appropriate as an overlay coat or partial replacement of portions of the pavement. In those cases, cleaning of the asphalt surface will be needed prior to overlay coat application.

Technologies for extending the life of asphalt pavements are continually being developed through the use of polymer additives and technologies for placement of asphalt. The above maintenance descriptions should be considered guidelines. Local, experienced asphalt contractors that are active in trade groups, such as the National Asphalt Pavement Association (NAPA), the Asphalt Institute, Inc., or local membership in the Wisconsin Asphalt Pavement Association, should be consulted for the latest technological advances in asphalt pavement technology.

#### **4.0 SCHEDULE OF ACTIVITIES**

The key to maintaining asphalt pavements is early detection of defects and maintenance or corrective action of asphalt deterioration. Inspections as described in Section 3.0 of this PMP should be conducted once per year. Documentation of the inspections should be completed by Black & Decker representatives, familiar with this plan, and can be transmitted to the WDNR representative by March 30 for the previous year's inspection, if requested.

Minor defects that can be maintained or corrected early can help prevent asphalt deterioration and thereby preclude infiltration of water into the subsurface at the Site.

#### **5.0 COMPLETION ACTIVITIES**

The practical extent of restrictions and maintenance of the asphalt pavement at the Site may be completed under certain conditions. These conditions include determination that the residual contamination no longer poses an unreasonable risk to human health and the environment or the impervious barrier can be assumed to be adequate with a prescribed maintenance schedule without inspections.

Criteria that may be used in making these determinations include: (1) if WDNR changes the cleanup levels of the constituents, or (2) removal of the contaminants, and/or (3) determination that the barrier will provide adequate protection against excessive infiltration for a reasonable

length of time without further inspection or maintenance. Any changes or completion of this PMP, which would impact the WDNR Conditional Case Closure, will be made in consultation with and the acceptance of the WDNR.

## 6.0 BIBLIOGRAPHY/REFERENCES

Wisconsin Department of Natural Resources (WDNR), 2003, Letter from Randy Maass (Bureau of Remediation and Redevelopment) to David Johnson (Black & Decker), dated October 20, 2003.

The Asphalt Institute, 1975, Maintenance and Repair of Asphalt Parking Lots, Construction Leaflet 15, 4 pages.

National Asphalt Pavement Association, (NAPA) 5100 Forbes Blvd. Lanham, MD 20706;  
<http://www.hotmix.org/>

Wisconsin Asphalt Pavement Association, <http://www.wispave.org/>

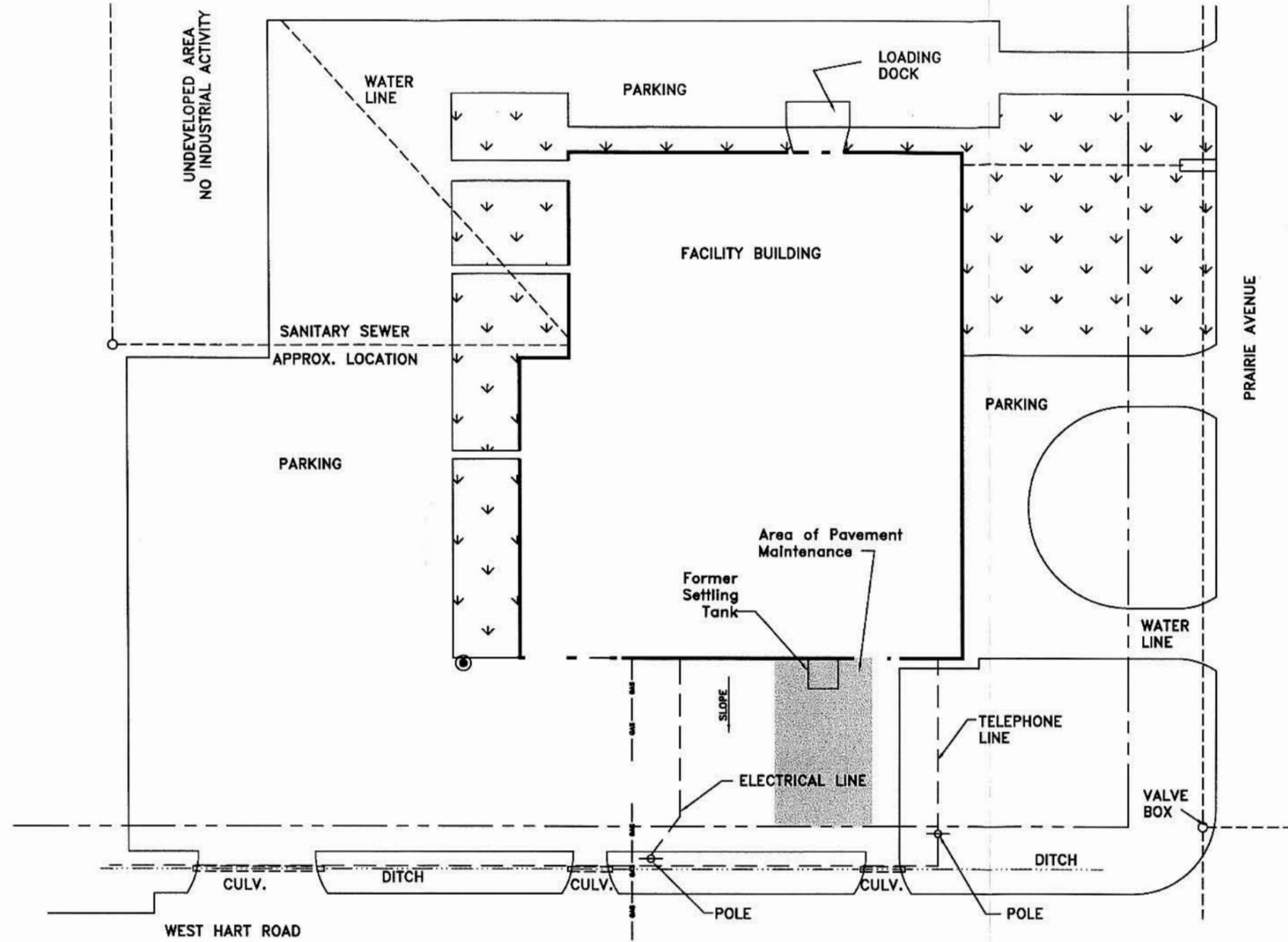


Figure 1

Former Knife Works Facility  
BELOIT WISCONSIN

PAVEMENT MAINTENANCE AREA

DRAWN BY J.Clerk	DATE June 7, 2005	PROJ. NO. 10396	DWG. NO. 10396Site
APPROVED BY DAO	SCALE 1"=80'		

REVISIONS



Based on drawing 10-TW993993(Triad)